

81 00084
Supp. no. 1

Golden Gate Commuter Ferryboat System

Supplement 1

**By
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Naval Architects · Marine Engineers
Seattle, Washington**

8000084
NEW

GOLDEN GATE COMMUTER

FERRYBOAT SYSTEM

&

OPTIMUM VESSEL DESIGN

San Francisco - Marin Crossing

for

GOLDEN GATE BRIDGE,

HIGHWAY & TRANSPORTATION DISTRICT

SUPPLEMENT I



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FOREWORD

Supplement I contains the basic mathematical computations and analyses that underlie the Spaulding/Heye design study entitled GOLDEN GATE COMMUTER FERRYBOAT SYSTEM.

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SECTION I

I. BASIS FOR OPERATING EXPENSE AND FINANCING ANALYSIS

1. Wages & Allowances
2. Stores, Supplies & Equipment
3. Other Vessel Expense
4. Maintenance & Repair
5. Insurance
6. Fuel Oil Auxiliaries
7. Fuel Oil Underway
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BASIS FOR OPERATING EXPENSE AND FINANCING ANALYSIS

GOLDEN GATE FERRYBOAT SYSTEM

Symbols

L	=	Length overall
B	=	Maximum breadth
D	=	Depth of hull & superstructure
C_N	=	$\frac{L \times B \times D}{100}$
N	=	Number of passenger seats (inside and protected)
SHP	=	Total shaft horsepower main engines
D	=	Diesel power
GT	=	Gas turbine power
Op Ye ₁	=	5082 hour operating year
Op Ye ₂	=	3847 hour operating year
h _o	=	Hours underway
h _r	=	Hours in operation
V	=	Vessel value

1. Wages & Allowances

(See analyses: A, B, C & D)

2. Stores, Supplies & Equipment

(Deck & Engine Stores including lubricating oil)

Annual Deck Stores cost = $C_N \times \$1.70$

Lube oil cost (diesel) = $\$.00024 \times \text{SHP} \times h_o$ (oil @ \$1.00/gal.)

Lube oil cost (turbine) = $\$.0000416 \times \text{SHP} \times h_o$ (oil @ \$1.50/gal.)

Annual Engine Stores cost (diesel) = $\$.71 \times \text{SHP}$

Annual Engine Stores cost (turbine) = $\$.25 \times \text{SHP}$

Annual Miscellaneous Equip. cost (hydrofoils) = $\$.00102 \times \text{SHP}/h_o$

3. Other Vessel Expense

(Includes fresh water, shore power & communications)

Annual expense = $C_N \times \$2.58$

4. Maintenance & Repair

Diesel Engine

Annual repair & maintenance cost = \$.0010 x SHP x h_o

Conventional Vessel

Gas Turbine

Contract with engine mfr

Cost = \$.00326 x SHP x h_o

Contract with drive mfr

Cost = \$.00105 x SHP x h_o

Advanced Systems

Gas Turbine

Contract with engine mfr

Cost = \$.00326 x SHP x h_o

Contract with drive mfr

Cost = \$.00306 x SHP x h_o

Support Equipment

Cost = \$.00184 x SHP x h_o

Misc. Equipment

Cost = \$.00102 x SHP x h_o

Jet Pump

Cost = \$.00175 x SHP x h_o

Drydocking, painting & hull maintenance

Steel Hull

Annual Cost = C_N x \$5.22

Aluminum Hull

Annual Cost = C_N x \$9.90

Passenger Spaces

Annual Cost = N x \$10.90

5. Insurance

Conventional Vessel cost/yr

Hull & machinery @ 4.0% x V

Protection and indemnity @ 1.0% x V

Advanced Systems cost/yr

Hull & machinery @ 4.5% x V

Protection and indemnity @ \$50. x N

6. Fuel Oil Auxiliaries

Diesel Oil @ 14-1/2¢/gal.

Based on 10 kw

100 pass.

1 kw = 1.341 SHP

Consumption based on fuel rate of .40#/SHP/hr

Cost = \$0.0011 x N x h_r

7. Fuel Oil Underway

Diesel Power Diesel Oil @ 14-1/2¢/gal.

Consumption based upon a rate of .39#/SHP/hr

$$\text{Cost} = \frac{.39}{7.25} \times .145 \times \text{SHP} \times h_o$$

$$\text{Cost} = \$.0078 \times \text{SHP} \times h_o$$

Gas Turbine Power Diesel Oil @ 14-1/2¢/gal.

Consumption based upon a rate of .60#/SHP/hr

$$\text{Cost} = \frac{.60}{7.25} \times .145 \times \text{SHP} \times h_o$$

$$\text{Cost} = \$.012 \times \text{SHP} \times h_o$$

8. Financing (Payment to Principal and Interest)

A. Based upon amortizing 20 year bonds bearing 8-3/4% interest with monthly straight line payments to principal and interest.

$$\text{Annual Expense} = .1060453 \times V$$

$$\text{Cost/hr (5082 hr/yr)} = 2.0867 \times V \times 10^{-5}$$

$$\text{Cost/hr (3847 hr/yr)} = 2.7563 \times V \times 10^{-5}$$

B. Based upon amortizing 20 year bonds bearing 7.0% interest with monthly straight line payments to principal and interest.

$$\text{Annual Expense} = .093036 \times V$$

$$\text{Cost/hr (5082 hr/yr)} = 1.8307 \times V \times 10^{-5}$$

$$\text{Cost/hr (3847 hr/yr)} = 2.4184 \times V \times 10^{-5}$$

1. Wages and Allowances (Analysis)

A. VESSELS UNDER 100 GROSS TONS AND OVER 1,000 SHP

(1) UNION AGREEMENTS

(a) Operators are members of the Marine Engineers Beneficial Association.

(b) Deckhands are members of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN A-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated 360 days per year. Weekdays we have considered operating each vessel 16 hours per day with two crews each working an eight-hour shift. Weekends and holidays each vessel will be operated 10 hours per day by a third or "relief crew." We have allowed for a two-week vacation per year per man and 9 paid holidays. It is to be recognized that by operating more than one vessel certain crew interchangeability in manning can be effected which would be to the advantage of the proposed ferry system. Wage levels used are for the year 1972.

Manning/Crew:		Cost/Year
2 Operators @ \$1,200/month		\$28,800
1 Class I Deckhand @ \$875/month		10,500
3 Class II Deckhands @ \$850/month		30,600
<u>6</u>	Basic Annual Wages	<u>\$69,900</u>
	Overtime @ 10%	6,990
	Annual Wages/Crew	<u>\$76,890</u>

Operation:

Basic Crew 40 hrs/week x 50 weeks	=	2,000 hrs
Vessel operates as follows:		
Weekdays 247 days @ 16 hrs		3,952 hrs
Weekends 104 days @ 10 hrs		1,040 hrs
Holidays <u>9 days @ 10 hrs</u>		<u>90 hrs</u>
360 days		5,082 hrs/year

$$\frac{\$76,890}{2,000 \text{ hrs}} = \$38.45/\text{hr} \text{ -or- } \$1,538/40\text{-hr week}$$

Wages:

Basic Annual Wage "Regular Crew"		
2 x \$76,890		\$153,780
Basic Annual Wage "Relief Crew"		
Weekends:		
Straight Time		
104 days x 8 hrs @ \$38.45/hr	\$31,990	
Overtime		
104 days x 2 hrs @ \$57.675/hr	11,996	
	<u>\$43,986</u>	
Holidays: (Overtime)		
9 days x 10 hrs @ \$57.675/hr	5,191	49,177
		<u>49,177</u>
Total Annual Crew Wages		\$202,957

Allowances:

As the "relief crew" works a sufficient number of hours to entitle it to the full benefit of all allowances we have considered 3 full crews per vessel or a total of 18 men receiving the following benefits:

Health & Welfare		
\$100/month/man	\$21,600	
Pension		
\$45/month/man	9,720	
Uniform Allowance		
\$110/year/man	1,980	
Vacation		
3 crews @ 2 weeks/crew		
3 x 2 x \$1,538/week	9,228	42,528

Payroll Taxes:

F.I.C.A.		
5.0% x 18 x \$7,800	\$ 7,020	
Unemployment (Calif. State)		
3.5% x 18 x \$3,800	2,394	9,414

TOTAL ANNUAL CREW COSTS (Plan A-1) \$254,899

Average Hourly Cost:

\$254,899 = \$50.16/hour
5,082 hrs

A. VESSELS UNDER 100 GROSS TONS AND OVER 1,000 SHP (contd.)

(3) OPERATING PLAN A-2 (3,847 hr/yr)

In the following computation it is assumed that each vessel will be operated 360 days per year; however, wages are based on 52 weeks or 364 days/year. Weekdays we have considered operating each vessel 11 hours per day with one crew and weekends we have considered operating each vessel 10 hours per day with the same crew. It is proposed under this arrangement that each vessel could have two crews alternating between a week-on and a week-off. Each crew would work 7 days per week and would be paid 8 hours straight time plus the corresponding overtime depending whether it is week-day or weekend service.

The nine paid holidays have been computed at 10 hours plus 10% O.T. allowance or an equivalent of 11 hours per day at overtime rates. We have allowed for a two-week vacation per year per man. The published hourly rates are based upon a 52-week working year. These computations have been corrected to allow for the two-week vacation expense.

Basic Annual Wage: Crew "A" and "B"

Manning/Crew: (Hourly Rates)

Straight Time	Crew Cost/Hour
2 Operators @ \$6.94	\$13.88
1 Class I Deckhand @ \$5.06	5.06
3 Class II Deckhands @ \$4.91	14.73
<u>6</u>	<u>\$33.67/hr</u>
Overtime:	
2 Operators @ \$10.41	\$20.82
1 Class I Deckhand @ \$7.59	7.59
3 Class II Deckhands @ \$7.365	22.10
<u>6</u>	<u>\$50.51/hr</u>

Weekdays:

8 hrs @ \$33.67	\$269.36	Crew
3 hrs @ \$50.51	151.53	Cost/Week
<u>11</u> 5 days @	<u>\$420.89</u>	<u>\$2,104.45</u>

Weekends:

8 hrs @ \$33.67	\$269.36	
2 hrs @ \$50.51	101.02	
<u>10</u> 2 days	<u>\$370.38</u>	<u>740.76</u>

Weekly Wages/Operating Crew. \$2,845.21

Operation:

Each crew -- week-on and week-off

Vessel operates as follows:

Weekdays	247 days @ 11 hrs	2,717	
Weekends 52 x 2	104 days @ 10 hrs	1,040	
Holidays	9 days @ 10 hrs	90	
	360 days	3,847 hrs/year	

Wages:

52 x \$2,845.21	\$147,951	
+ 10% overtime	14,795	

Total Annual Crew Wages \$162,746

Holidays:

Holidays worked are based upon 10 hours plus 10% O.T. allowance which is equivalent to 11 hours at overtime rates. As this affects only the 8 hours of straight time for the working crew, add the following:

\$50.51 - \$33.67 = \$16.84 x 8 hrs x 9 days \$ 1,213

For the crew off-duty, add the following:

\$33.67 x 8 hrs x 9 days 2,425 3,638

Allowances:

Basically there are two or a total of 12 men/vessel operating under this plan who share the following benefits:

Health & Welfare		
\$100/month/man	\$14,400	
Pension		
\$45/month/man	6,480	
Uniform Allowance		
\$110/year/man	1,320	
Vacation		
2 crews @ 2 weeks/crew		
2 x 2 x \$2,845.21	<u>11,381</u>	33,581

Payroll Taxes:

F.I.C.A.		
5.0% x 12 x \$7,800	\$ 4,680	
Unemployment (Calif. State)		
3.5% x 12 x \$3,800	<u>1,596</u>	<u>6,276</u>

TOTAL ANNUAL CREW COSTS (Plan A-2) \$ 206,241

Average Hourly Cost:

\$206,241 = \$53.61/hour
3,847 hrs

B. ADVANCED SYSTEMS CRAFT --

35 KNOT SPEED UNDER 100 GROSS TONS AND OVER 1,000 SHP

(1) UNION AGREEMENTS

(a) Operators are members of the Marine Engineers Beneficial Association.

(b) Deckhands are members of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN B-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-1. A 10% allowance has been added to the standard wage rates to compensate for high-speed operation.

Manning/Crew:	Cost/Year
2 Operators @ \$1,320/month	\$31,680
1 Class I Deckhand @ \$963/month	11,556
3 Class II Deckhands @ \$935/month	33,660
Basic Annual Wages	\$76,896
Overtime @ 10%	7,690
Annual Wages/Crew	\$84,586

Operation:

Basic Crew 40 hrs/week x 50 weeks = 2,000 hrs

Vessel operates as follows:

Weekdays 247 days @ 16 hrs	3,952 hrs
Weekends 104 days @ 10 hrs	1,040 hrs
Holidays <u>9 days @ 10 hrs</u>	<u>90 hrs</u>
360	= 5,082 hrs/year

$$\frac{\$84,586}{2,000 \text{ hrs}} = \$42.30/\text{hr-or-} \$1,692/40\text{-hr week}$$

Wages:

Basic Annual Wage "Regular Crew"		
2 x \$84,586		\$169,172
Basic Annual Wage "Relief Crew"		
Weekends:		
Straight time		
104 days x 8 hrs @ \$42.30/hr	\$35,194	
Overtime		
104 days x 2 hrs @ \$63.45/hr	13,198	
	<u>\$48,392</u>	
Holidays: (Overtime)		
9 days x 10 hrs @ \$63.45/hr	5,711	54,103
		<u>54,103</u>
<u>Total Annual Crew Wages</u>		\$223,275

Allowances:

Similar to that described under Operating Plan A-1:

Health & Welfare		
\$100/month/man	\$21,600	
Pension		
\$45/month/man	9,720	
Uniform Allowance		
\$110/year/man	1,980	
Vacation		
3 crews @ 2 weeks/crew		
3 x 2 x \$1,692/week	<u>10,152</u>	
		42,452

Payroll Taxes:

F.I.C.A.		
5.0% x 18 x \$7,800	\$ 7,020	
Unemployment (Calif. State)		
3.5% x 18 x \$3,800	<u>2,394</u>	
		<u>9,414</u>

TOTAL ANNUAL CREW COSTS (Plan B-1) . . \$276,141

Average Hourly Cost:

$$\frac{\$276,141}{5,082} = \$53.34/\text{hour}$$

B. ADVANCED SYSTEMS CRAFT -- 35 KNOT SPEED
UNDER 100 GROSS TONS AND OVER 1,000 SHP (contd.)

(3) OPERATING PLAN B-2 (3,847 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-2.

A 10% allowance has been added to the standard wage rates to compensate for high-speed operation.

Basic Annual Wage: Crew "A" and "B"

Manning /Crew: (Hourly Rates)

Straight Time:

	Crew Cost/Hour
2 Operators @ \$7.63	\$15.26
1 Class I Deckhand @ \$5.57	5.57
3 Class II Deckhands @ \$5.40	16.20
6	<u>\$37.03/hr</u>

Overtime:

2 Operators @ \$11.45	\$22.90
1 Class I Deckhand @ \$8.35	8.35
3 Class II Deckhands @ \$8.10	24.30
6	<u>\$55.55/hr</u>

Weekdays:

8 hrs @ \$37.03	\$296.24		Crew
3 hrs @ \$55.55	166.65		Cost/Week
11 hrs	<u>\$462.89</u>	=	\$2,314.45

Weekends:

8 hrs @ \$37.03	\$296.24		
2 hrs @ \$55.55	111.10		
10 hrs	<u>\$407.34</u>	=	<u>814.68</u>

Weekly Wages/Operating Crew. \$3,129.13

Operation:

Each crew -- Week-on Week-off

Vessel operates as follows:

Weekdays	247 days @ 11 hrs	2,717	
Weekends 52 x 2	104 days @ 10 hrs	1,040	
Holidays	9 days @ 10 hrs	90	
	<u>360</u>	<u>3,847 hrs/yr</u>	

Wages:

52 x \$3,129.13	\$162,715	
+ 10% overtime	<u>16,272</u>	

Total Annual Crew Wages \$178,987

Holidays:

Holidays worked are based upon 10 hours plus 10% O. T. allowance which is equivalent to 11 hours at overtime rates. As this affects only the 8 hours of straight time for the working crew, add the following:

· \$55.55 - \$37.03 = \$18.52 x 8 hrs x 9 days \$1,334

For the crew off duty, add the following:

\$37.03 x 8 hrs x 9 days	<u>2,666</u>	4,000
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Allowances:

Basically there are two crews of 6 men each with a total of 12 men/vessel operation under this plan who share the following benefits:

Health & Welfare		
\$100/month/man	\$14,400	
Pension		
\$45/month/man	6,480	
Uniform Allowance		
\$110/year/man	1,320	
Vacation		
2 crews @ 2 weeks/crew		
2 x 2 x \$3,129.13	<u>12,517</u>	34,717

Payroll Taxes:

F. I. C. A.		
5.0% x 12 x \$7,800	\$ 4,680	
Unemployment (Calif. State)		
3.5% x 12 x \$3,800	<u>1,596</u>	<u>6,276</u>

TOTAL ANNUAL CREW COSTS (Plan B-2) \$223,980

Average Hourly Cost:

<u>\$223,980</u>	= \$58.22/hour
3,847 hrs.	

C. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP
CARRYING LESS THAN 1,000 PASSENGERS

(1) UNION AGREEMENTS

- (a) Master with pilotage and radar endorsement is a member of the Masters Mates and Pilots Union.
- (b) Engineer is a member of the Marine Engineers Beneficial Association.
- (c) Able-bodied and ordinary seamen are members of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN C-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-1.

Manning/Crew:	Cost/Year
1 Master/Pilot @ \$1,538/month	\$18,456
1 Engineer @ \$1,200/month	14,400
3 A. B. Seamen @ \$980/month	35,280
1 Ord. Seaman @ \$900/month	10,800
<u>6</u>	
Basic Annual Wages	\$78,936
Overtime @ 10%	7,894
Annual Wages/Crew	<u>\$86,830</u>

Operation:

Basic Crew 40 hrs/week x 50 weeks = 2,000 hrs

Vessel operates as follows:

Weekdays 247 days @ 16 hrs	3,952 hrs
Weekends 104 days @ 10 hrs	1,040 hrs
Holidays 9 days @ 10 hrs	90 hrs
<u>360 days</u>	<u>5,082 hrs/year</u>

\$86,830 = \$43.42/hr -or- \$1,736.60/40 hr wk
2,000 hrs

Wages:

Basic Annual Wage "Regular Crew"		
2 x \$86,830		\$173,660
Basic Annual Wage "Relief Crew"		
Weekends:		
Straight time		
104 days x 8 hrs @ \$43.42/hr	\$36,125	
Overtime		
104 days x 2 hrs @ \$65.13/hr	13,547	
	<u>\$49,672</u>	
Holidays: (Overtime)		
9 days x 10 hrs @ \$65.13/hr	5,862	55,534
		<u>55,534</u>
Total Annual Crew Wages		\$229,194

Allowances:

Similar to that described under Operating Plan A-2.		
Health & Welfare		
\$100/month/man	\$21,600	
Pension		
\$45/month/man	9,720	
Uniform Allowance		
\$110/year/man	1,980	
Vacation		
2 weeks/crew x 3 crews		
2 x 3 x \$1,736.60	10,420	
	<u>10,420</u>	
		43,720

Payroll Taxes:

F.I.C.A.		
5.0% x 18 x \$7,800	\$ 7,020	
Unemployment (Calif. State)		
3.5% x 18 x \$3,800	2,394	
		<u>9,414</u>

TOTAL ANNUAL CREW COSTS (Plan C-1) . . \$282,328

Average Hourly Cost: .

$\frac{\$282,328}{5,082 \text{ hrs}} = \$55.55/\text{hour}$

C. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP
CARRYING LESS THAN 1,000 PASSENGERS (cont'd)

(3) OPERATING PLAN C-2 (3,847 hr/yr)

In the following computation it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-2.

Basic Annual Wage: Crew "A" and "B"

Manning/Crew: (Hourly Rates)

Straight Time:		Crew Cost/Hour
1 Master/Pilot @ \$8.88		\$ 8.88
1 Engineer @ \$6.94		6.94
3 A.B. Seamen @ \$5.66		16.98
1 Ord. Seaman @ \$5.20		5.20
6		<u>\$ 38.00/hour</u>

Overtime:		
1 Master/Pilot @ \$13.31		\$ 13.31
1 Engineer @ \$10.41		10.41
3 A.B. Seamen @ \$ 8.49		25.47
1 Ord. Seaman @ \$ 7.80		7.80
6		<u>\$ 56.99/hour</u>

Weekdays:			Crew
8 hrs @ \$38.00		\$304.00	
3 hrs @ \$56.99		171.00	Cost/Week
11	5 days @	\$475.00 =	\$2,375.00

Weekends:			
8 hrs @ \$38.00		\$304.00	
2 hrs @ \$56.99		114.00	
10	2 days @	\$418.00 =	<u>836.00</u>

Weekly Wages/Operating Crew \$3,211.00

Operation:

Each crew -- week-on week-off

Vessel operates as follows:

Weekdays 247 days @ 11 hrs	2,717
Weekends 104 days @ 10 hrs	1,040
Holidays 9 days @ 10 hrs	90
360 days	<u>3,847 hrs/yr</u>

Wages:

52 x \$3,211	\$166,972	
+ 10% overtime	<u>16,697</u>	

Total Annual Crew Wages \$183,669

Holidays:

Holidays worked are based upon 10 hours plus 10% O.T. allowance which is equivalent to 11 hours at overtime rates. As this affects only the 8 hours of straight time for the working crew, add the following:

\$56.99 - \$38.00 = \$18.99 x 8 hrs x 9 days \$1,368

For the crew off-duty, add the following:

\$38.00 x 8 hrs x 9 days	<u>2,736</u>	
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4,104

Allowances:

Basically there are two crews of 6 men each or a total of 12 men/vessel operating under this plan who should share the following benefits:

Health & Welfare

\$100/month/man	\$ 14,400	
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Pension

\$45/month/man	6,480	
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Uniform Allowance

\$110/year/man	1,320	
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Vacation

2 crews @ 2 weeks/crew

2 x 2 x \$3,211	<u>12,844</u>	
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35,044

Payroll Taxes:

F.I.C.A.

5.0% x 12 x \$7,800	\$ 4,680	
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Unemployment (Calif. State)

3.5% x 12 x \$3,800	<u>1,596</u>	<u>6,276</u>
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TOTAL ANNUAL CREW COSTS (Plan C-2) . . . \$229,093

D. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP
CARRYING MORE THAN 1,000 PASSENGERS

(1) UNION AGREEMENTS

- (a) Master with Pilotage & radar endorsement is a member of the Masters Mates and Pilots Union.
- (b) Engineer is a member of the Marine Engineers Beneficial Association.
- (c) Able-bodied and ordinary seamen are member of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN D-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-1.

Manning/Crew:	Cost/Year
1 Master/Pilot @ \$1,538/month	\$18,456
1 Engineer @ \$1,200/month	14,400
4 A.B. Seamen @ \$980/month	47,040
2 Ord. Seamen @ \$900/month	21,600
8	
Basic Annual Wages	\$101,496
Overtime @ 10%	10,150
Annual Wages/Crew	\$111,646

Operation:

Basic Crew 40 hrs/week x 50 weeks = 2,000 hrs

Vessel operates as follows:

Weekdays 247 days @ 16 hours	3,952 hrs
Weekends 104 days @ 10 hours	1,040 hrs
Holidays 9 days @ 10 hours	90 hrs
360 days	= 5,082 hrs/year

$$\frac{\$111,646}{2,000 \text{ hrs}} = \$55.82/\text{hr} \text{ -or- } \$2,233/40\text{hr week}$$

Wages:

Basic Annual Wage "Regular Crew"		
2 x \$111,646		\$223,292
Basic Annual Wage "Relief Crew"		
Weekends:		
Straight Time		
104 days x 8 hrs @ \$55.82/hr	\$46,442	
Overtime		
104 days x 2 hrs @ \$83.74/hr	17,418	
	<u>\$63,860</u>	
Holidays: (Overtime)		
9 days x 10 hrs @ \$83.74/hr	7,537	71,397
		<u>71,397</u>
Total Annual Crew Wages.		\$294,689

Allowances:

As the "relief crew" works a sufficient number of hours to entitle it to the full benefit of all allowances we have considered 3 full crews per vessel or a total of 24 men receiving the following benefits:

Health & Welfare		
\$100/month/man	\$28,800	
Pension		
\$45/month/man	12,960	
Uniform Allowance		
\$110/month/man	2,640	
Vacation		
2 weeks/crew x 3 crews		
2 x 3 x \$2,233	13,398	
	<u>13,398</u>	
		57,798

Payroll Taxes:

F.I.C.A.		
5.0% x 24 x \$7,800	\$ 9,360	
Unemployment (Calif. State)		
3.5% x 24 x \$3,800	3,192	12,552
	<u>3,192</u>	<u>12,552</u>

TOTAL ANNUAL CREW COSTS (Plan D-1) . . \$365,039

Average Hourly Cost:

\$365,039
5,082 hrs = \$71.83/hour

D. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP
CARRYING MORE THAN 1,000 PASSENGERS (cont'd)

(3) OPERATING PLAN D-2 (3,847 hr/yr)

In the following computation it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-2.

Basic Annual Wage: Crew "A" and "B"

Manning/Crew: (Hourly Rate)

Straight Time:

	Crew Cost/Hour
1 Master/Pilot @ \$8.88	\$ 8.88
1 Engineer @ \$6.94	6.94
4 A.B. Seamen @ \$5.66	22.64
2 Ord. Seamen @ \$5.20	10.40
8	<u>\$ 48.86/hour</u>

Overtime:

1 Master/Pilot @ \$13.31	\$ 13.31
1 Engineer @ \$10.41	10.41
4 A.B. Seamen @ \$ 8.49	33.96
2 Ord. Seamen @ \$ 7.80	15.60
8	<u>\$ 73.28/hour</u>

Weekdays:

8 hrs @ \$48.86	\$390.88	Crew
3 hrs @ \$73.28	219.84	Cost/Week
11	<u>\$610.72</u>	= \$3,054.00
5 days @		

Weekends:

8 hrs @ \$48.86	\$390.88
2 hrs @ \$73.28	146.56
10	<u>\$537.44</u>
2 days @	= <u>1,075.00</u>

Weekly Wages/Operating Crew \$4,129.00

Operation:

Each crew -- week-on week-off

Vessel operates as follows:

Weekdays 247 days @ 11 hrs	2,717
Weekends 104 days @ 10 hrs	1,040
Holidays <u>9 days @ 10 hrs</u>	<u>90</u>
360 days	3,847 hrs/year

Wages:

52 x \$4,129	\$214,708	
+10% Overtime	<u>21,471</u>	

Total Annual Crew Wages \$236,179

Holidays:

Holidays worked are based upon 10 hours plus 10% O.T. allowance which is equivalent to 11 hours at overtime rates. As this affects only 8 hours of straight time for the working crew, add the following:

\$73.28 - \$48.86 = \$24.42 x 8 hrs x 9 days \$ 1,759

For the crew off-duty, add the following:

\$48.86 x 8 hrs x 9 days	<u>3,518</u>	5,277
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Allowances:

Basically there are two crews of 8 men each or a total of 16 men/vessel operating under this plan who should share the following benefits:

Health & Welfare

\$100/month/man	\$ 19,200	
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Pension

\$45/month/man	8,640	
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Uniform Allowance

\$110/year/man	1,760	
----------------	-------	--

Vacation

2 crews @ 2 weeks/crew

2 x 2 x \$4,129	<u>16,516</u>	
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46,116

Payroll Taxes:

F.I.C.A.

5.0% x 16 x \$7,800	\$ 6,240	
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Unemployment (Calif. State)

3.5% x 16 x \$3,800	<u>2,128</u>	
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8,368

TOTAL ANNUAL CREW COSTS (Plan D-2) . . \$295,940

Average Hourly Cost:

\$295,940

3,847 hrs = \$76.93/hour

SECTION II

II. OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

1. M. V. Golden Gate
2. M. V. Hawaii State
3. Blount 500
4. Halter 500
5. Blount 624
6. Spaulding 209
7. G. T. Avalon
8. Spaulding 165
9. Hydro-Ski Ferry
10. Hydrodyne Commuter
11. Boeing 929 Hydrofoil

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

M. V. GOLDEN GATE
SAN DIEGO MARINE CONSTRUCTION CO.

L = 113.58'
B = 30.73'
D = 25.0'
N = 440 (582 Total)
SHP = 1100 (D)

V = \$700,000

$C_N = \frac{113.58 \times 30.73 \times 25}{100} = 870$

	COST/YEAR				COST/HOUR	
	5,082 hr/yr Plan A-1		3,847 hr/yr Plan A-2		5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$254,899		\$206,241		\$50.16	\$53.61
2. <u>Stores, Supplies & Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (D) (Included in Hourly Underway Costs) Engine Stores $\$0.71 \times 1100$	\$1,480		\$1,480			
	780	2,260	780	2,260	.44	.58
3. <u>Other Vessel Expense</u> $C_N \times \$2.58$	2,240		2,240		.44	.58
4. <u>Maintenance & Repair</u> Diesel Engines (Included in Hourly Underway Costs) Drydock Painting & Hull Maintenance (Steel Hull) $C_N \times \$5.22$ Passenger Spaces $N \times \$10.90$	\$4,540 4,800	9,340	\$4,540 4,800	9,340	1.84	2.43
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$28,000 7,000	35,000	\$28,000 7,000	35,000	6.89	9.10
6. <u>Fuel Oil Auxiliaries</u> $\$.0011 \times 440 \times \text{hr}$	2,460		1,865		.49	.49
A. TOTAL FIXED OPERATING COST	\$306,199		\$256,946			
B. AVERAGE COST/HOUR - AT TERMINAL					\$60.26/hr	\$66.79/hr
ADDITIONAL HOURLY COSTS - UNDERWAY:						
Average Cost/Hour - at Terminal (B)					\$60.26	\$66.79
2. <u>Stores, Supplies & Equipment</u> Lube Oil (D) $\$.00024 \times 1100$.27	.27
4. <u>Maintenance & Repair</u> Diesel Engines $\$.0010 \times 1100$					1.10	1.10
7. <u>Fuel Oil Underway</u> (Diesel Power) $\$.0078 \times 1100$					8.58	8.58
C. AVERAGE COST/HOUR UNDERWAY					\$70.21/hr	\$76.74/hr
8. <u>Financing</u> \$700,000 @ 8-3/4% for 20 years Cost/hr					\$14.60	\$19.29
Average Cost/Hour at Terminal (B)					\$60.26	\$66.79
Financing (8)					14.60	19.29
D. AVERAGE COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL					\$74.86/hr	\$86.08/hr
Average Cost/Hour - Underway (C)					\$70.21	\$76.74
Financing (8)					14.60	19.29
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - UNDERWAY . .					\$84.81/hr	\$96.03/hr

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

M. V. HAWAII STATE BLOUNT MARINE CORPORATION

V = Published Cost	\$480,000
Modified for SFO Bay	<u>140,000</u>
	\$620,000
+ 10%	<u>62,000</u>
	<u>\$682,000</u>

L = 128.0'
B = 27.0'
D = 24.0'
N = 500
SHP = 1450
 $C_N = \frac{128 \times 27 \times 24}{100} = 830'$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$50.16	\$53.61
2. <u>Stores, Supplies & Equipment</u>				
Deck Stores $C_N \times \$1.70$	\$1,410	\$1,410		
Lube Oil (D) (Included in Hourly Underway Costs)				
Engine Stores $\$0.71 \times 1450$	<u>1,030</u>	<u>1,030</u>	.48	.63
3. <u>Other Vessel Expenses</u>				
$C_N \times \$2.58$	2,140	2,140	.42	.56
4. <u>Maintenance & Repair</u>				
Diesel Engines (Included in Hourly Underway Costs)				
Drydock Painting & Hull Maintenance (Steel Hull)				
$C_N \times \$5.22$	\$4,330	\$4,330		
Passenger Spaces $N \times \$10.90$	<u>5,450</u>	<u>5,450</u>	1.93	2.54
5. <u>Insurance</u>				
Hull & Machinery .04 x V	\$27,300	\$27,300		
P/I .01 x V	<u>6,820</u>	<u>6,820</u>	6.71	8.87
6. <u>Fuel Oil Auxiliaries</u>				
.0011 x N x hr	<u>2,800</u>	<u>2,120</u>	.55	.55
A. TOTAL FIXED OPERATING COST	<u>\$306,179</u>	<u>\$256,841</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$60.25/hr</u>	<u>\$66.76/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$60.25	\$66.76
2. <u>Stores, Supplies & Equipment</u>		
Lube Oil (D) \$.00024 x 1450/hr	.35	.35
4. <u>Maintenance & Repair</u>		
Diesel Engines \$.0010 x 1450/hr	1.45	1.45
7. <u>Fuel Oil Underway</u> (Diesel Power) \$.0078 x 1450/hr	<u>11.30</u>	<u>11.30</u>
C. AVERAGE COST/HOUR - UNDERWAY	<u>\$73.35/hr</u>	<u>\$79.86/hr</u>
8. <u>Financing</u>		
\$682,000 @ 8-3/4% for 20 years Cost/hr	<u>\$14.23</u>	<u>\$18.79</u>
Average Cost/Hour at Terminal (B)	\$60.25	\$66.76
Financing (8)	<u>14.23</u>	<u>18.79</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL.	<u>\$74.48/hr</u>	<u>\$85.55/hr</u>
Average Cost/Hour Underway	\$73.35	\$79.86
Financing (8)	<u>14.23</u>	<u>18.79</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDER WAY. .	<u>\$87.58/hr</u>	<u>\$98.65/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

COMMUTER BOAT - 500
BLOUNT MARINE CORPORATION

L = 160.5'
B = 28.0'
D = 13.3'
N = 500
SHP = 2540 (D)

V = \$750,000 + 10% = \$825,000

$C_N = \frac{160.5 \times 28 \times 13.3}{100} = 597$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$50.16	\$53.61
2. <u>Stores, Supplies & Equipment</u>				
Deck Stores $C_N \times \$1.70$	\$1,012	\$1,012		
Lube Oil (D) (Included in Hourly Underway Costs)				
Engine Stores $\$0.71 \times 2540$	<u>1,800</u>	<u>1,800</u>	.55	.73
3. <u>Other Vessel Expenses</u> $C_N \times \$2.58$	1,540	1,540	.31	.40
4. <u>Maintenance & Repair</u>				
Diesel Engine (Included in Hourly Underway Costs)				
Drydock Painting & Hull Maintenance (Steel Hull)				
$C_N \times \$5.22$	\$3,110	\$3,110		
Passenger Spaces $N \times \$10.90$	<u>5,450</u>	<u>5,450</u>	1.68	2.23
5. <u>Insurance</u>				
Hull & Machinery .04 x V	\$33,000	\$33,000		
P/I .01 x V	<u>8,250</u>	<u>8,250</u>	8.12	10.73
6. <u>Fuel Oil Auxiliaries</u> $\$.0011 \times N \times \text{hr}$	<u>2,800</u>	<u>2,115</u>	.55	.55
A. TOTAL FIXED OPERATING COST	<u>\$311,861</u>	<u>\$262,518</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$61.37/hr</u>	<u>\$68.25/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour at Terminal (B)	\$61.37	\$68.25
2. <u>Stores, Supplies & Equipment</u> Lube Oil (D) $\$.00024 \times 2540/\text{hr}$.61	.61
4. <u>Maintenance & Repair</u> Diesel Engines $\$.0010 \times 2540/\text{hr}$	2.54	2.54
7. <u>Fuel Oil Underway</u> (Diesel Power) $\$.0078 \times 2540/\text{hr}$	<u>19.80</u>	<u>19.80</u>
C. AVERAGE COST/HOUR UNDERWAY	<u>\$84.32/hr</u>	<u>\$91.20/hr</u>
8. <u>Financing</u> \$825,000 @ 8-3/4% for 20 yrs Cost/hr	<u>\$17.21</u>	<u>\$22.74</u>
Average Cost/Hour at Terminal (B)	\$61.37	\$68.25
Financing (8)	<u>17.21</u>	<u>22.74</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL.	<u>\$78.58/hr</u>	<u>\$90.99/hr</u>
Average Cost/Hour Underway (C)	\$84.32	\$91.20
Financing (8)	<u>17.21</u>	<u>22.74</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY. .	<u>\$101.53/hr</u>	<u>\$113.94/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HALTER - 500
HALTER MARINE SERVICES

L = 162.5'
B = 29.0'
D = 25.0'
N = 471 (506 Total)
SHP = 3900 (D)

V = \$1,500,000 + 10% = \$1,650,000

$C_N = \frac{162.5 \times 29 \times 25}{100} = 1,180$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$ 50.16	\$ 53.61
2. <u>Stores, Supplies & Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (D) (Included in Hourly Underway Costs) Engine Stores $\$0.71 \times 3900$	\$2,010 <u>2,770</u>	\$2,010 <u>2,770</u>	 .94	 1.24
3. <u>Other Vessel Expenses</u> $C_N \times \$2.58$	3,050	3,050	.60	.80
4. <u>Maintenance & Repair</u> Diesel Engine (Included in Hourly Underway Costs) Drydock, Painting & Hull Maintenance (Aluminum Hull) $C_N \times \$9.90$ Passenger Spaces $N \times \$10.90$	\$11,700 <u>5,510</u>	\$11,700 <u>5,510</u>	 3.39	 4.47
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$66,000 <u>16,500</u>	\$66,000 <u>16,500</u>	16.23	21.45
6. <u>Fuel Oil Auxiliaries</u> $\$.0011 \times N \times \text{hr}$	<u>2,840</u>	<u>2,150</u>	<u>.56</u>	<u>.56</u>
A. TOTAL FIXED OPERATING COST	<u>\$365,279</u>	<u>\$315,931</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$ 71.88/hr</u>	<u>\$ 82.13/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$ 71.88	\$ 82.13
2. <u>Stores, Supplies & Equipment</u> Lube Oil (D) $\$.00024 \times 3900/\text{hr}$.94	.94
4. <u>Maintenance & Repair</u> Diesel Engines $\$.0010 \times 3900/\text{hr}$	3.90	3.90
7. <u>Fuel Oil Underway</u> (Diesel Power) $\$.0078 \times 3900/\text{hr}$	<u>30.42</u>	<u>30.42</u>
C. AVERAGE COST/HOUR - UNDERWAY	<u>\$107.14/hr</u>	<u>\$117.39/hr</u>
8. <u>Financing</u> \$1,650,000 @ 8-3/4% for 20 yrs Cost/hr	<u>\$ 34.43</u>	<u>\$ 45.48</u>
Average Cost/Hour at Terminal (B)	\$ 71.88	\$ 82.13
Financing (8)	<u>34.43</u>	<u>45.48</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL..	<u>\$106.31/hr</u>	<u>\$127.61/hr</u>
Average Cost/Hour Underway (C)	\$107.14	\$117.39
Financing (8)	<u>34.43</u>	<u>45.48</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	<u>\$141.57</u>	<u>\$162.87</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

COMMUTER BOAT - 624
BLOUNT MARINE CORPORATION

L = 185.0'
B = 23.0'
D = 42.0'
N = 624
SHP = 2900 (D)

V = \$925,000 + 10% = \$1,017,500

$C_N = \frac{185 \times 42 \times 23}{100} = 1790$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2
1. <u>Wages & Allowance</u> (See Breakdown)	\$282,328	\$229,093	\$ 55.55	\$ 59.55
2. <u>Stores, Supplies & Equipment</u>				
Deck Stores $C_N \times \$1.70$	\$3,040	\$3,040		
Lube Oil (Included in Hourly Underway Costs)				
Engine Stores $\$0.71 \times 2900$	<u>2,060</u>	<u>2,060</u>	1.01	1.33
3. <u>Other Vessel Expenses</u>				
$C_N \times \$2.58$	4,620	4,620	.91	1.20
4. <u>Maintenance & Repair</u>				
Diesel Engine (Included in Hourly Underway Costs)				
Drydock Painting & Hull Maintenance (Steel Hull)				
$C_N \times \$5.22$	\$9,340	\$9,340		
Passenger Spaces $N \times \$10.90$	<u>6,800</u>	<u>6,800</u>	3.18	4.20
5. <u>Insurance</u>				
Hull & Machinery .04 x V	\$40,800	\$40,800		
P/I .01 x V	<u>10,175</u>	<u>10,175</u>	10.03	13.25
6. <u>Fuel Oil Auxiliaries</u>				
$\$.0011 \times N \times \text{hr}$	<u>3,490</u>	<u>2,640</u>	.69	.69
A. TOTAL FIXED OPERATING COST	<u>\$362,653</u>	<u>\$308,568</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$ 71.37/hr</u>	<u>\$ 80.22/hr</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour ~ at Terminal (B)			\$ 71.37	\$ 80.22
2. <u>Stores, Supplies & Equipment</u>				
Lube Oil (D) $\$.00024 \times 2900/\text{hr}$.70	.70
4. <u>Maintenance & Repair</u>				
Diesel Engines $\$0.0010 \times 2900/\text{hr}$			2.90	2.90
7. <u>Fuel Oil Underway</u>				
(Diesel Power) $\$0.0078 \times 2900/\text{hr}$			<u>22.60</u>	<u>22.60</u>
C. AVERAGE COST/HOUR UNDERWAY			<u>\$ 97.57</u>	<u>\$106.42</u>
8. <u>Financing</u>				
\$1,017,500 @ 8-3/4% for 20 yrs Cost/hr			<u>\$ 21.23</u>	<u>\$ 28.05</u>
Average Cost/Hour at Terminal (B)			\$ 71.37	\$ 80.22
Financing (8)			<u>21.23</u>	<u>28.05</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL .			<u>\$ 92.60</u>	<u>\$108.27</u>
Average Cost/Hour Underway (C)			\$ 97.57	\$106.42
Financing (8)			<u>21.23</u>	<u>28.05</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .			<u>\$118.80</u>	<u>\$134.47</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

SPAULDING - 209'
P. F. SPAULDING & ASSOCIATES, DESIGNER

L = 209.5'
B = 38.0'
D = 30.0'
N = 756 (976 Total)
SHP = 5700 (D)

V = \$2,650,000

$C_N = \frac{209.5 \times 38 \times 30}{100} = 2390$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$282,328	\$229,093	\$ 55.55	\$ 59.55
2. <u>Stores, Supplies & Equipment</u>				
Deck Stores $C_N \times \$1.70$	\$4,060	\$4,060		
Lube Oil (Included in Hourly Underway Costs)				
Engine Stores $\$0.71 \times 5700$	<u>5,050</u>	<u>4,050</u>	1.60	2.11
3. <u>Other Vessel Expenses</u>				
$C_N \times \$2.58$	6,160	6,160	1.21	1.60
4. <u>Maintenance & Repair</u>				
Diesel Engine (Included in Hourly Underway Costs)				
Drydock Painting & Hull Maintenance (Steel Hull)				
$C_N \times \$5.22$	\$12,450	\$12,450		
Passenger Spaces $N \times \$10.90$	<u>8,460</u>	<u>8,460</u>	4.11	5.44
5. <u>Insurance</u>				
Hull & Machinery .04 x V	\$106,000	\$106,000		
P/I .01 x V	<u>26,500</u>	<u>26,500</u>	26.07	34.44
6. <u>Fuel Oil Auxiliaries</u>				
$\$.0011 \times N \times \text{hr}$	<u>4,340</u>	<u>3,285</u>	.85	.85
A. TOTAL FIXED OPERATING COST	<u>\$454,348</u>	<u>\$400,058</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$ 89.39/hr</u>	<u>\$103.99/hr</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - at Terminal (B)			\$ 89.39	\$103.99
2. <u>Stores, Supplies & Equipment</u>				
Lube Oil (D) $\$0.00024 \times 5700/\text{hr}$			1.37	1.37
4. <u>Maintenance & Repair</u>				
Diesel Engines $\$0.0010 \times 5700/\text{hr}$			5.70	5.70
7. <u>Fuel Oil Underway</u>				
(Diesel Power) $\$0.0078 \times 5700/\text{hr}$			<u>44.50</u>	<u>44.50</u>
C. AVERAGE COST/HOUR UNDERWAY			<u>\$140.96/hr</u>	<u>\$155.56/hr</u>
8. <u>Financing</u>				
$\$2,650,000 @ 8-3/4\% \text{ for } 20 \text{ years Cost/hr}$			<u>\$ 55.30</u>	<u>\$ 73.04</u>
Average Cost/hour at Terminal (B)			\$ 89.39	\$103.99
Financing (8)			<u>55.30</u>	<u>73.04</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - AT TERMINAL			<u>\$144.69/hr</u>	<u>\$177.03/hr</u>
Average Cost/Hour - Underway (C)			\$140.96	\$155.56
Financing (8)			<u>55.30</u>	<u>73.04</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - UNDERWAY . .			<u>\$196.26/hr</u>	<u>\$228.60/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

G. T. AVALON
MARTINOLICH SHIPBUILDING CORP.

L = 160.0'
B = 27.0'
D = 24.0'
N = 505
SHP= 5000 (GT)

V = \$2,100,000

$C_N = \frac{160.0 \times 27.0 \times 24.0}{100} = 1035$

	COST/YEAR				COST/HOUR	
	5,082 hr/yr Plan A-1		3,847 hr/yr Plan A-2		5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$254,899		\$206,241		\$ 50.16	\$ 53.61
2. <u>Stores, Supplies & Equipment</u>						
Deck Stores $C_N \times \$1.70$	\$1,760		\$1,760			
Lube Oil (GT) (Included in Hourly Underway Costs)						
Engine Stores \$.25 x 5000	<u>1,250</u>	3,010	<u>1,250</u>	3,010	.59	.78
3. <u>Other Vessel Expense</u>						
$C_N \times \$2.58$		2,670		2,670	.53	.70
4. <u>Maintenance & Repair</u>						
Gas Turbine (Contract)(Included in Hourly Underway Costs)						
Strut Drive (Contract) (Included in Hourly Underway Costs)						
Drydocking, Painting & Hull Maintenance (Aluminum Hull)						
$C_N \times \$9.90$	\$10,250		\$10,250			
Passenger Spaces N x \$10.90	<u>5,500</u>	15,750	<u>5,500</u>	15,750	3.10	4.10
5. <u>Insurance</u>						
Hull & Machinery .04 x V	\$84,000		\$84,000			
P/I .01 x V	<u>21,000</u>	105,000	<u>21,000</u>	105,000	20.66	27.29
6. <u>Fuel Oil Auxiliaries</u>						
\$.0011 x N x hr		<u>2,820</u>		<u>2,140</u>	<u>.56</u>	<u>.56</u>
A. TOTAL FIXED OPERATING COST	<u>\$384,149</u>		<u>\$334,811</u>			
B. AVERAGE COST/HOUR - AT TERMINAL					<u>\$ 75.60/hr</u>	<u>\$ 87.04/hr</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:						
Average Cost/Hour - at Terminal (B)					\$ 75.60	\$ 87.04
2. <u>Stores, Supplies & Equipment</u>						
Lube Oil (GT) \$.0000416 x 5000					.21	.21
4. <u>Maintenance & Repair</u>						
Gas Turbine (Contract) .00326 x 5000					16.00	16.00
Strut Drive .00105 x 5000					5.25	5.25
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 5000/hr					<u>60.00</u>	<u>60.00</u>
C. AVERAGE COST/HOUR UNDERWAY					<u>\$157.06/hr</u>	<u>\$168.50/hr</u>
8. <u>Financing</u>					<u>\$ 43.82</u>	<u>\$ 57.88</u>
\$2,100,000 @ 8-3/4% for 20 yrs Cost/hr						
Average Cost/Hr at Terminal (B)					\$ 75.60	\$ 87.04
Financing (8)					<u>43.82</u>	<u>57.88</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL .					<u>\$119.42/hr</u>	<u>\$144.92/hr</u>
Average Cost/Hour Underway (C)					\$157.06	\$168.50
Financing (8)					<u>43.82</u>	<u>57.88</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .					<u>\$200.88/hr</u>	<u>\$226.38/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

SPAULDING - 165'
P. F. SPAULDING & ASSOCIATES, DESIGNER

L = 166.0'
B = 31.0'
D = 25.0'
N = 459 (636 Total)
SHP = 5000 (GT)

V = \$2,100,000

$C_N = \frac{166 \times 31 \times 25}{100} = 1290$

	COST/YEAR				COST/HOUR	
	5,082 hr/yr Plan A-1		3,847 hr/yr Plan A-2		5,082 hr/yr Plan A-1	3,487 hr/yr Plan A-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$254,899		\$206,241		\$ 50.16	\$ 53.61
2. <u>Stores, Supplies & Equipment</u>						
Deck Stores $C_N \times \$1.70$	\$2,190		\$2,190			
Lube Oil (GT) (Included in Hourly Underway Costs)						
Engine Stores \$.25 x SHP	<u>1,250</u>	3,440	<u>1,250</u>	3,440	.68	.90
3. <u>Other Vessel Expense</u>						
$C_N \times \$2.58$	3,330		3,330		.66	.87
4. <u>Maintenance & Repair</u>						
Gas Turbine (Contract) (Included in Hourly Underway Costs)						
Strut Drive (Contract) (Included in Hourly Underway Costs)						
Drydecking, Painting & Hull Maintenance (Aluminum Hull)						
$C_N \times \$9.90$	\$12,750		\$12,750			
Passenger Spaces N x \$10.90	<u>5,668</u>	18,418	<u>5,668</u>	18,418	3.62	4.78
5. <u>Insurance</u>						
Hull & Machinery .04 x V	\$84,000		\$84,000			
P/I .01 x V	<u>21,000</u>	105,000	<u>21,000</u>	105,000	20.66	27.29
6. <u>Fuel Oil Auxiliaries</u>						
.0011 x N x hr	<u>2,907</u>		<u>2,200</u>		.57	.57
A. TOTAL FIXED OPERATING COST	<u>\$387,994</u>		<u>\$338,629</u>			
B. AVERAGE COST/HOUR - AT TERMINAL					<u>\$ 76.35/hr</u>	<u>\$ 88.02/hr</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:						
Average Cost/Hour - at Terminal (B)					\$ 76.35	\$ 88.02
2. <u>Stores, Supplies & Equipment</u>						
Lube Oil (GT) \$.0000416 x 5000					.21	.21
4. <u>Maintenance & Repair</u>						
Gas Turbine (Contract) \$.00326 x 5000					16.00	16.00
Strut Drive (Contract) \$.00105 x 5000					5.25	5.25
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 5000/hr					<u>60.00</u>	<u>60.00</u>
C. AVERAGE COST/HOUR UNDERWAY					<u>\$157.81/hr</u>	<u>\$169.48/hr</u>
8. <u>Financing</u>						
\$2,100,000 @ 8-3/4% for 20 yrs Cost/hr					<u>\$ 43.82</u>	<u>\$ 57.88</u>
Average Cost/hr at Terminal (B)					\$ 76.35	\$ 88.02
Financing (8)					<u>43.82</u>	<u>57.88</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL. .					<u>\$120.17/hr</u>	<u>\$145.90/hr</u>
Average Cost/Hour Underway (C)					\$157.81	\$169.48
Financing (8)					<u>43.82</u>	<u>57.88</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .					<u>\$201.63/hr</u>	<u>\$227.36/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HYDRO-SKI FERRY
HYDRO-SKI INTERNATIONAL CORP.

L = 114.25'
B = 38.0'
D = 16.0'
N = 300
SHP = 8000

V = \$1,500,000 + 10% = \$1,650,000

$C_N = \frac{114.25 \times 38 \times 16}{100} = 695$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$276,141	\$223,980	\$ 54.34	\$ 58.22
2. <u>Stores, Supplies & Equipment</u> Deck Stores $C_N \times \$1.70$ Note: Lube oil and engine stores are included in maintenance of repairs in hourly underway costs.	1,180	1,180	.23	.31
3. <u>Other Vessel Expenses</u> $C_N \times \$2.58$	1,790	1,790	.35	.47
4. <u>Maintenance & Repair</u> (Aluminum Hull) Gas Turbine (Contract) (Included in Hourly Underway Costs) Hydro Jet Pump (Contract) (Included in Hourly Underway Costs) Misc. Ship Maintenance (Including Drydocking, Hull Repairs, Accommodation Maintenance, Electronics, etc.) Hydro-Ski International	50,820	50,820	10.00	13.21
5. <u>Insurance</u> Hull & Machinery .045 x V \$74,200 P/I \$50 x N 15,000	89,200	89,200	17.55	23.19
6. <u>Fuel Oil Auxiliaries</u> (Driven off Main Turbines)				
A. TOTAL FIXED OPERATING COSTS	<u>\$419,131</u>	<u>\$366,970</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$ 82.47/hr</u>	<u>\$ 95.40/hr</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - At Terminal (B)			\$ 82.47	\$ 95.40
4. <u>Maintenance & Repair</u> Gas Turbine (Contract) \$.00326 x 8000/hr Jet Pump (Contract) \$.00175 x 8000/hr			26.00 14.00	26.00 14.00
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 8000/hr			96.00	96.00
C. AVERAGE COST/HOUR - UNDERWAY			<u>\$218.47/hr</u>	<u>\$231.40/hr</u>
8. <u>Financing</u> \$1,650,000 @ 8-3/4% for 20 yrs Cost/hr			\$ 34.43	\$ 45.48
Average Cost/Hour at Terminal (B)			\$ 82.47	\$ 95.40
Financing (8)			34.43	45.48
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL..			<u>\$116.90/hr</u>	<u>\$140.88/hr</u>
Average Cost/Hour - Underway (C)			\$218.47	\$231.40
Financing (8)			34.43	45.48
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY			<u>\$252.90/hr</u>	<u>\$276.88/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HYDRODYNE COMMUTER
HYDRODYNE MARINE CORPORATION

L = 112.42'
B (Hull) = 23.5'
D = 16.0'
N = 300
SHP = 4900 (GT)

V = \$2,000,000 + 10% = \$2,200,000

$C_N = \frac{112.42 \times 23.5 \times 16}{100} = 423'$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$276,141	\$223,980	\$ 54.34	\$ 58.22
2. <u>Stores, Supplies & Equipment</u> Deck Stores $C_N \times \$1.70$ Note: From hydrodyne: Lube Oil and engine stores are included as miscellaneous equipment in hourly underway costs.	720	720	.14	.19
3. <u>Other Vessel Expense</u> (Included with miscellaneous equip- ment in hourly underway costs.)				
4. <u>Maintenance & Repair</u> (Aluminum Hull) Gas Turbine (Contract) (Included in hourly underway costs) Drive Unit (Contract) (Included in hourly underway costs) Support Equipment (Contract) (Included in hourly underway costs) Misc. ship maintenance including drydocking, hull repairs, accommodation maintenance, etc. (Hydrodyne)	40,000	40,000	7.87	10.40
5. <u>Insurance</u> Hull & Machinery .045 x V \$99,000 P/I \$50. x N 15,000	114,000	114,000	22.43	29.63
6. <u>Fuel Oil Auxiliaries</u> \$.0011 x N x hr	1,680	1,270	.33	.33
A. TOTAL FIXED OPERATING COSTS	<u>\$432,541</u>	<u>\$379,970</u>		
B. AVERAGE COST/HOUR - AT TERMINAL			<u>\$ 85.11</u>	<u>\$ 98.77</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - at Terminal (B)			\$ 85.11	\$ 98.77
2. <u>Stores, Supplies & Equipment</u> Miscellaneous equipment from Hydrodyne (\$.00102 x 4900/hr)			5.00	5.00
4. <u>Maintenance & Repair</u> Gas Turbines (Contract) \$.00326 x 4900 Drive Unit (Contract) \$.00306 x 4900 Support Eqt. \$.00184 x 4900			16.00 15.00 9.00	16.00 15.00 9.00
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 4900/hr			58.80	58.80
C. AVERAGE COST/HOUR - UNDERWAY			<u>\$188.91/hr</u>	<u>\$202.57/hr</u>
8. <u>Financing</u> \$2,200,000 @ 8-3/4% for 20 years Cost/hr Average Cost/hour - at Terminal (B) Financing (8)			45.91 85.11 45.91	60.64 98.77 60.64
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL . .			<u>\$131.02/hr</u>	<u>\$159.41/hr</u>
Average Cost/hour - Underway (C)			\$188.91	\$202.57
Financing (8)			45.91	60.64
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - UNDERWAY . .			<u>\$234.82/hr</u>	<u>\$263.21/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HYDROFOIL 929-110
THE BOEING COMPANY

L = 93.0'
B = 35.0'
D = 24.0'
N = 300
SHP = 4500

V = \$2,750,000 + 10% = \$3,000,000

$C_N = \frac{93 \times 35 \times 24}{100} = 780$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2
1. <u>Wages & Allowances</u> (See Breakdown)	\$276,141	\$223,980	\$ 54.34	\$ 58.22
2. <u>Stores, Supplies & Equipment</u> Deck Stores $C_N \times \$1.70$ Note: Lube oil and engine stores are included as miscellaneous equipment in underway costs.	1,325	1,325	.26	.34
3. <u>Other Vessel Expenses</u> (Included with miscellaneous equipment in underway costs.)				
4. <u>Maintenance & Repair</u> (Aluminum Hull) Boeing Routine Maintenance \$10/day x 360 \$3,600 Pre-Flight Inspection \$5/day x 360 1,800 Gas Turbine (Contract) (Included in hourly underway costs) Hydro Jet Pump (Contract) (Included in hourly underway costs) Misc. ship maintenance including drydocking, hull repairs, accommodation maintenance, electronics, etc. (Boeing)		\$3,600 1,800		
	60,000	65,400	12.87	17.00
5. <u>Insurance</u> Hull & Machinery .045 x V \$130,000 P/I \$50. x N 15,000		\$130,000 15,000		
	145,000	145,000	28.53	37.69
6. <u>Fuel Oil Auxiliaries</u> (Driven off Main Turbines)				
A. TOTAL FIXED OPERATING COSTS	\$487,866	\$435,705		
B. AVERAGE COST/HOUR - AT TERMINAL			\$ 96.00/hr	\$113.25/hr
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour at Terminal (B)			\$ 96.00	\$113.25
2. <u>Stores, Supplies & Equipment</u> \$.00102 x 4500/hr			4.60	4.60
4. <u>Maintenance & Repair</u> Gas Turbines (Contract) \$.00326 x 4500/hr Jet Pump (Contract) \$.00175 x 4500/hr			15.00 7.88	15.00 7.88
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 4500/hr			54.00	54.00
C. AVERAGE COST/HOUR - UNDERWAY			\$177.48/hr	\$194.73/hr
8. <u>Financing</u> \$3,000,000 @ 8-3/4% for 20 years Cost/hr Average Cost/hour - at Terminal (B) Financing (8)			\$ 62.60 \$ 96.00 62.60	\$ 82.69 \$113.25 82.69
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL..			\$158.60	\$195.94
Average Cost/hour Underway			\$177.48	\$194.73
Financing (8)			62.60	82.69
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .			\$240.08	\$277.42

SECTION III

III. BASIS FOR PROJECTED VESSEL OPERATING EXPENSES AND FINANCING COSTS BEYOND 1972

1. SCHEDULE FOR ESCALATION
2. ESCALATION FOR INDIVIDUAL VESSEL CANDIDATES

SCHEDULE

ESCALATION RATE

<u>Item</u>	<u>Annual Increase</u>
1. Wages & Allowance	7%
2. Stores Supplies & Equipment	2-1/2%
3. Other Vessel Expenses	2-1/2%
4. Maintenance & Repair	5%
5. Insurance	1%
6. Fuel Oil	1%
7. Fuel Oil Underway	1%
8. Financing	0%
9. Vessel Construction Cost	5%

In order to project the annual increase in operating costs, the foregoing schedule of escalation has been used.

CORTE MADERA SERVICE
(REGULAR SERVICE)

SPAULDING 165'

(5082 Hr. Yr)

STANDARD 105

(5082 AF, FY)

Item	1972 Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average % Annual Escalation	
					DOC	DOC + Fin.
1. Wages & Allowances	254,899	.3453	.2652	7.0	2.417	1.856
2. Stores Supplies & Equipment	3,440	.0046	.0036	2.5	.012	.009
3. Other Vessel Exp.	3,330	.0045	.0035	2.5	.011	.009
4. Maint. & Repairs	18,418	.0249	.0192	5.0	.124	.096
5. Insurance	105,000	.1422	.1093	1.0	.142	.109
6. F.O.-Aux.	2,907	.0039	.0030	1.0	.004	.003
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	910	.0012	.0009	2.5	.003	.002
4. Maint. & Repair Turbine	68,803	.0932	.0716	5.0	.466	.358
Drive	22,596	.0306	.0235	5.0	.153	.178
7. Fuel Oil	258,010	.3496	.2685	1.0	.349	.268
8. Financing	738,313	1.0000	.2317			
	222,695					
	961,008					
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					3.66	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						2.888

CORTE MADERA SERVICE
(SUPPLEMENTAL SERVICE)

SPAULDING 165'

(3847 Hr. Yr)

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average % Annual Escalation	
					DOC	DOC+Fin.
1. Wages & Allowances	206,241	.3462	.2520	7.0	2.4234	1.7640
2. Stores Supplies & Equipment	3,440	.0058	.0042	2.5	.0145	.0105
3. Other Vessel Exp.	3,330	.0056	.0041	2.5	.0140	.0103
4. Maint. & Repairs	18,418	.0309	.0225	5.0	.1545	.1125
5. Insurance	105,000	.1763	.1283	1.0	.1763	.1283
6. F.O.-Aux.	2,200	.0037	.0027	1.0	.0037	.0027
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment						
4. Maint. & Repair	668	.0011	.0008	2.5	.0027	.0020
Turbine	50,491	.0848	.0617	5.0	.4240	.3085
Drive	16,582	.0278	.0203	5.0	.1390	.1050
7. Fuel Oil	189,341	.3178	.2314	1.0	.3178	.2314
	595,711	1.0000				
8. Financing	222,695		.2721			
	818,406		1.0000			
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					3.670	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						2.672

SYSTEM I (5 - Spaulding 165)

Service	Total Annual Cost	Weight	% Annual Increase	Weighted Annual Increase
<u>Direct Operating Cost</u>				
3 - Regular x \$738,313	\$2,214,939	.6502	3.660	2.380
2 - Suppl. x \$595,711	<u>1,191,922</u>	<u>.3498</u>	3.670	<u>1,284</u>
	\$3,406,361	1.0000		
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST				3.664
<u>Direct Operating Cost + Financing</u>				
3 - Regular x \$961,008	\$2,883,024	.6379	2.888	1.842
2 - Suppl. x \$818,406	<u>1,636,812</u>	<u>.3621</u>	2.672	<u>.968</u>
	\$4,519,836	1.0000		
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING				2.810

CORTE MADERA SERVICE
BOEING HYDROFOIL
SUPPLEMENTAL SERVICE

(3847 Hrs. Yr.)

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average % Annual Escalation	
					DOC	DOC+Fin.
1. Wages & Allowances	223,980	.3276	.2236	7.0	2.2932	1.5652
2. Stores Supplies & Equipment	1,325	.0019	.0013	2.5	.0048	.0033
3. Other Vessel Exp.						
4. Maint. & Repairs	65,400	.0956	.0653	5.0	.4780	.3265
5. Insurance	145,000	.2120	.1447	1.0	.2120	.1447
6. F.O.-Aux.						
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	14,020	.0205	.0140	2.5	.0513	.0350
4. Maint. & Repair Turbine	45,684	.0668	.0456	5.0	.3340	.2280
Jet Pump	23,996	.0351	.0239	5.0	.1755	.1195
7. Fuel Oil	164,447	.2405				
	683,852	1.0000				
8. Financing	318,135		.3175	0		
	1,001,987					
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					3.7893	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						2.5863

SYSTEM II (3 Spaulding 165)
(2 Boeing 929)

Service	Total Annual Cost	Weight	% Annual Increase	Weighted Annual Increase
<u>Direct Operating Cost</u>				
3 - Regular x \$738,313	\$2,214,939	.6182	3.66	2.26
2 - Suppl. x \$683,852	<u>1,367,704</u>	<u>.3818</u>	3.789	<u>1.45</u>
	\$3,582,643	1.0000		
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST				3.71
<u>Direct Operating Cost + Financing</u>				
3 - Regular x \$961,008	\$2,883,024	.5899	2.888	1.704
2 - Suppl. x \$1,001,987	<u>2,003,974</u>	<u>.4101</u>	2.5863	<u>1.061</u>
	\$4,886,998	1.0000		
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING				2.77

SAUSALITO SERVICE

M. V. GOLDEN GATE

(5082 Hr. Yr.)

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average % Annual Escalation	
					DOC	DOC+Fin.
1. Wages & Allowance	254,899	.739	.608	7.0	5.173	4.256
2. Stores Supplies & Equipment	2,260	.007	.005	2.5	.017	.012
3. Other Vessel Exp.	2,240	.006	.005	2.5	.015	.012
4. Maint. & Repairs	9,340	.027	.022	5.0	.135	.110
5. Insurance	35,000	.101	.083	1.0	.101	.083
6. F.O.-Aux.	2,460	.008	.006	1.0	.008	.006
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	1,049	.003	.003	2.5	.007	.007
4. Maint. & Repair	4,310	.012	.010	5.0	.060	.050
7. Fuel Oil	33,472	.097	.080	1.0	.097	.080
	345,030	1.000				
8. Financing	74,232		.178			
	419,262		1.000			
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					5.61	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						4.62

SAUSALITO SERVICE

M. V. GOLDEN GATE

(3847 Hr. Yr)

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average % Annual Escalation	
					DOC	DOC+Fin.
1. Wages & Allowance	206,241	.721	.573	7.0	5.047	4.011
2. Stores Supplies & Equipment	2,260	.008	.006	2.5	.020	.015
3. Other Vessel Exp.	2,240	.008	.006	2.5	.020	.015
4. Maint. & Repairs	9,340	.033	.026	5.0	.165	.130
5. Insurance	35,000	.123	.097	1.0	.123	.097
6. F.O.-Aux.	1,865	.006	.005	1.0	.006	.005
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	775	.003	.002	2.5	.007	.005
4. Maint. & Repair	3,188	.011	.009	5.0	.055	.045
7. Fuel Oil	24,753	.087	.069	1.0	.087	.069
	285,662	1.000				
8. Financing	74,232		.207			
	359,894		1.000			
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					5.53	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						4.39

SECTION IV

IV. BASIS FOR ESTIMATING FERRYBOAT PATRONAGE AND ANNUAL REVENUE

1. BACKGROUND
2. PRIMARY MARKET FOR FERRYBOAT SERVICE
3. SPAULDING/HEYER PATRONAGE ESTIMATES
4. ANNUAL GROSS REVENUE ESTIMATES
5. DEMAND MODEL ADJUSTMENTS USED WHEN TESTING VESSEL
CANDIDATES

IV. BASIS FOR ESTIMATING FERRYBOAT PATRONAGE AND ANNUAL REVENUE

1. BACKGROUND DATA

Basic background data was derived primarily from the following:

Optimum Bus System, Marin County Transit District,
August 1969

Feasibility Study of San Francisco - Marin Ferry System,
Arthur D. Little, Inc., July 1969

Bay Area Transportation Report, Bay Area Transportation Study Commission, May 1969, Supplements II and III

San Francisco - Marin Crossing, Division of Bay Toll Crossings, Transportation Agency, State of California, 1967

Statistical Data Files, Golden Gate Bridge, Highway and Transportation District

The latter provided information about the Bridge's operation of the Tiburon Ferry Service between November 1969 and March 1970, including a survey of passengers conducted during January 1970.

2. PRIMARY MARKET FOR FERRYBOAT SERVICE

The primary market for commuter ferryboat service between Marin County and San Francisco was found to be approximately 60% of the Marin commuters destined for downtown San Francisco. This area lies east of Van Ness Avenue and north of Howard Street. Downtown San Francisco is subdivided into the Central Business District and the Outer Central Business District. The Central Business District is bordered by Howard, Powell, Pacific and the Embarcadero; the Outer Central Business District includes the remainder of the defined area. The majority of the Marin County commuters are bound for the C.B.D. and comparative distribution estimates follow:

TO:	Marin County Transit Dist. 1968		A. D. Little Study 1969		Tiburon Survey Jan. 1970		Spaulding/Heye Assumption August 1970
C.B.D.	54.2%	82.3%	43.7%	75.1%	87.9%	89%	90.0%
O.C.B.D.	11.6%	17.7%	14.5%	24.9%	10.8%	11%	10.0%
Sub-Total	65.8%	100.0%	58.2%	100.0%	98.7%	100%	100.0%
Rest of S.F.	34.2%	—	41.8%	—	1.3%	—	—
TOTAL	100.0%	—	100.0%	—	100.0%	—	—

The A. D. Little Study reported the following potential switch of commuters to a modern ferryboat system:

32,000 commuters x 60% x 34% = 6,528 destined to
Downtown San Francisco.

Little's 34% diversion was derived as follows:

35% commuter drivers	x 49%	total commuters	= 17%
30% commuter car riders	x 21%	total commuters	= 6%
42% commuter bus riders	x 27%	total commuters	= 11%
	97%		34%

Analysis of the Tiburon Experiment shows that when the Bridge operated the Tiburon ferryboat service, 25% of the Tiburon Peninsula commuters to Downtown San Francisco were being served.

In a special report to the Bridge District during March 1970, Peat, Markwick, Mitchell and Company estimated that if ferryboat fares were the same as bus fares, 22% to 33% of the commuters would use the ferryboat service if the ferryboat service took from 10 to 20 minutes longer than the same trip via private automobile.

3. SPAULDING/HEYER PATRONAGE ESTIMATES

Four Demand Models were constructed for the purposes of testing ferryboat vessel candidates, estimating patronage and revenues, and designing an optimum ferryboat system. Model No. I was based upon the empirical data developed in the Tiburon Experiment and assumed the use of 15 and 20 knot conventional vessels. Fares were assumed at 50¢ O.W. between Southern Marin and San Francisco using 15 knot vessels, and at 75¢ between Central

Marin and San Francisco using 20 knot vessels. Block times considered were 30 minutes for Southern Marin and 45 minutes for Central Marin; service being offered at 30 minute intervals. It was further assumed that the service described would attract 25% of the Tiburon Peninsula market and 20% of the rest of the Marin commuter market destined for downtown San Francisco. The ratio of commuters to noncommuters was assumed to be 5:1.

Model No. II assumed that fares to both Southern and Central Marin would be 50¢ O.W. Service to Southern Marin was improved. Service to Central and Northern Marin via Corte Madera Creek was improved by the use of 25 knot vessels, reducing the block time from 45 to 40 minutes. The service improvement to Southern Marin increased that demand by 22.2%. The 33.3% reduction in fare (75¢ to 50¢) and the improved service to Corte Madera Creek caused the demand for this service to increase 38%. The ratio of commuters to noncommuters changed from 5:1 to 4:1 for Southern Marin service and to 3:1 for Central and Northern Marin service.

Model No. III assumed service being provided by advanced marine systems with one way fares to all terminals set at 75¢. Demand totals were greater than those in Model I due to the improved service, but were less than those in Model II because of the increase in fares by 50%.

Model No. IV was based upon the A. D. Little Study 50¢ O.W. advanced marine system proposal. However, only commuters destined to C.B.D. (90%) and O.C.B.D. (10%) were considered. This reduced Little's estimated weekday commuter demand by 33.3% from 11,000 to 7,334. The ratio of commuters to non-commuters (7:3) was used unchanged.

4. ANNUAL GROSS REVENUE ESTIMATES

The Little Study estimated the annual gross revenue for the proposed advanced marine system as follows:

253 wkdays	x 15,000 (C+N-C)	x \$1.00 R.T.	= \$3,795,000.
112 S/S/H	x 6,000 (C+N-C)	x \$1.00 R.T.	= 672,000.
	TOTAL		\$4,467,000.

The Little Study also considered revenues from concessions and parking. These latter have been omitted in the Spaulding/Heye study for the sake of simplicity and to be conservative.

The Spaulding/Heye gross annual revenue estimates have been based upon the following data:

Ratio of adults (full fare) to children (half fare):

Weekdays: Adults 90%, Children 10% or 9:1

$$90\% \times 1.00 + 10\% \times .50 = 95\%$$

Saturdays/Sundays/Holidays: 66.7% to 33.3% or 2:1

$$66.7\% \times 1.00 + 33.3\% \times .50 = 83.3\%$$

Comparative passenger loads:

Weekdays	100%	Commuter service
Saturdays	160%	Commuter service
Sundays	250%	Commuter service
Holidays	300%	Commuter service

Weighted revenue factor:

$$\begin{aligned}
 252 \text{ Weekdays} &\times (\underline{C+N-C}) \times 95\% \quad \times 100\% \times \$1.00 \text{ RT} = \$239.400 \\
 52 \text{ Saturdays} &\times (\underline{C+N-C}) \times 83.3\% \times 160\% \times \$1.00 \text{ RT} = 69.306 \\
 52 \text{ Sundays} &\times (\underline{C+N-C}) \times 83.3\% \times 250\% \times \$1.00 \text{ RT} = 108.290 \\
 9 \text{ Holidays} &\times (\underline{C+N-C}) \times 83.3\% \times 300\% \times \$1.00 \text{ RT} = \underline{22.491}
 \end{aligned}$$

\$439.487

2% bad weather and seasonal fluctuations

-8.790

\$430.697

Annual Gross Revenue @ 50¢ fare (OW) = $(\underline{C+N-C})$ = \$430.697

Annual Gross Revenue @ 75¢ fare (OW) = $1.5 \times (\underline{C+N-C}) = 1.5 \times 430.697$ = \$646.046

Bay Circle Cruise (Supplemental Service) annual revenue estimates have been based upon a comparative value judgment of vessel passenger appeal and the number of cruises available for each system. Fares for Bay Circle Cruises were assumed to be \$1.75 for 20 knot vessels, \$2.00 for 25 knot vessels and \$3.50 for advanced system craft (35+ knots).

Ratio of adults (full fare) to children (half fare):

66.7% to 33.3% or 2:1

$$66.7\% \times 1.00 + 33.3\% \times .50 = 83.3\%$$

Comparative passenger loads:

Weekdays	100%
Saturdays	150%
Sundays	200%
Holidays	225%

System Ia and Ib

Trips per day:

Weekdays	10/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 10	x \$2.00 =	\$4,198.32
52 Saturdays	x 83.3%	x 150%	x 9	x \$2.00 =	1,169.53
52 Sundays	x 83.3%	x 200%	x 9	x \$2.00 =	1,559.38
9 Holidays	x 83.3%	x 225%	x 9	x \$2.00 =	303.63
					<u>\$7,230.86</u>

Average load factor = 42%

Revenue = \$7,230.86 x 42% x 636 = \$1,931,507.

System IIa and IIb

Trips per day:

Weekdays	9/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 9	x \$3.50 =	\$6,612.37
52 Saturdays	x 83.3%	x 150%	x 9	x \$3.50 =	2,046.69
52 Sundays	x 83.3%	x 200%	x 9	x \$3.50 =	2,728.91
9 Holidays	x 83.3%	x 225%	x 9	x \$3.50 =	531.35
					<u>\$11,919.32</u>

Average load factor = 44%

Revenue = \$11,919.32 x 44% x 300 = \$1,573,350.

System IIIa and IVa

Trips per day:

Weekdays	10/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 10	x \$1.75 =	\$3,673.53
52 Saturdays	x 83.3%	x 150%	x 9	x \$1.75 =	1,023.34
52 Sundays	x 83.3%	x 200%	x 9	x \$1.75 =	1,364.46
9 Holidays	x 83.3%	x 225%	x 9	x \$1.75 =	265.66
					<u>\$6,327.00</u>

Average load factor = 30%

Revenue = \$6,327.00 x 30% x 500 = \$949,050.

System IIIb and IVb

Trips per day:

Weekdays	15/day
Weekends	13/day
Holidays	13/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 15	x \$1.75 =	\$5,510.30
52 Saturdays	x 83.3%	x 150%	x 13	x \$1.75 =	1,478.15
52 Sundays	x 83.3%	x 200%	x 13	x \$1.75 =	1,970.88
9 Holidays	x 83.3%	x 225%	x 13	x \$1.75 =	383.76
					<u>\$9,343.09</u>

Average load factor = 30%

Revenue = \$9,343.09 x 30% x 500 = \$1,401,464.

System Va

Trips per day:

Weekdays	5/day
Weekends	4/day
Holidays	4/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 5	x \$1.75 =	\$1,836.77
52 Saturdays	x 83.3%	x 150%	x 4	x \$1.75 =	454.82
52 Sundays	x 83.3%	x 200%	x 4	x \$1.75 =	606.42
9 Holiday	x 83.3%	x 225%	x 4	x \$1.75 =	118.08
					<u>\$3,016.09</u>

Average load factor = 30%

Revenue = \$3,016.08 x 30% x 624 = \$564,612.

System Vb

Trips per day:

Weekdays	10/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 10	x \$1.75 =	\$3,673.53
52 Saturdays	x 83.3%	x 150%	x 9	x \$1.75 =	1,023.34
52 Sundays	x 83.3%	x 200%	x 9	x \$1.75 =	1,364.46
9 Holidays	x 83.3%	x 225%	x 9	x \$1.75 =	265.67
					<u>\$6,327.00</u>

Average load factor = 30%

Revenue = \$6,327.00 x 30% x 624 = \$1,184.414.

System VIb and VIc

Trips per day:

Weekdays	5/day
Weekends	4/day
Holidays	4/day

Weighted revenue factor:

252 Weekdays	x 83.3%	x 100%	x 5	x \$1.75 =	\$1,838.77
52 Saturdays	x 83.3%	x 150%	x 4	x \$1.75 =	454.82
52 Sundays	x 83.3%	x 200%	x 4	x \$1.75 =	606.42
9 Holidays	x 83.3%	x 225%	x 4	x \$1.75 =	118.08
					<u>\$3,016.09</u>

Average load factor = 30%

$$\text{Revenue} = \$3,018.09 \times 30\% \times 976 = \$883,111.$$

Revenue projections were based upon increases of 5% per year for the Southern Marin service, 8% per year for the regular service to Corte Madera Creek, and 10% per year for the Bay Circle Cruise service.

5. MODEL ADJUSTMENTS USED WHEN TESTING VESSEL CANDIDATES

A. Southern Marin - 15 knot vessels

M.V. Golden Gate Class
M.V. Hawaii State Class

Model No. I: 998 Commuters
 1,198 Commuters + Noncommuters

No adjustment necessary.

B. Central Marin - 20 knot vessels

Blount 500
Halter 500
Blount 624
Spaulding 209

	Weekday <u>Commuters</u>	Commuters + <u>Noncommuters</u>	Annual Revenue <u>in \$000's</u>
Model No. I: Base Demand Central + Northern Market	2,748	3,298	\$2,131.
<u>Adjustment:</u> Increased demand from improved service: peak, etc.	+ 267	+ 322	+ 208.
75¢ O.W. Fare: TOTALS	3,015	3,620	<u>\$2,339.</u>
<u>Adjustment:</u> Increased demand from reduced fare, 75¢ to 50¢	+ 485	+ 980	
50¢ O.W. Fare: TOTALS	3,500	4,600	\$1,981.

C. <u>Central Marin - 25 knot vessels</u>		Spaulding 165 (G.T. Avalon not suitable for San Francisco Bay)	
	<u>Weekday Commuters</u>	<u>Commuters + Noncommuters</u>	<u>Annual Revenue in \$000's</u>
Model No. II: Base Demand Central + Northern Market	3,792	4,989	\$2,149.
<u>Adjustment: Increased</u> demand from improved service: peak and over- all passenger appeal	<u>+ 379</u>	<u>+ 499</u>	<u>+ 215.</u>
50¢ O.W. Fare: TOTALS	4,171	5,488	<u>\$2,364.</u>
D. <u>Central Marin - 25 and 35 knot vessel combination</u>		Spaulding 165 Boeing 929	
	<u>Weekday Commuters</u>	<u>Commuters + Noncommuters</u>	<u>Annual Revenue in \$000's</u>
Model No. II: Base Demand Central + Northern Market	3,792	4,989	\$2,149.
<u>Adjustment: Base</u> demand increased for hydrofoil service	<u>+ 708</u>	<u>+1,477</u>	<u>+ 636.</u>
50% O.W. Fare: TOTALS	4,500	6,466	<u>\$2,785.</u>
Model No. II: Base Demand Central + Northern Market		3,792	4,989
			\$2,149.
<u>Adjustment: Increased</u> demand from improved service and overall passenger appeal	<u>+1,008</u>	<u>+1,811</u>	<u>+ 780.</u>
50¢ O.W. Fare: TOTALS	4,800	6,800	<u>\$2,929.</u>

SECTION V

V. ESTIMATED FERRYBOAT SYSTEM VESSEL OPERATING
COST, FINANCING AND REVENUE

<u>Systems:</u>	<u>Vessel Combinations:</u>	<u>Service:</u>
I a & b	5 Spaulding 165	Corte Madera
II a & b	3 Spaulding 165 + 2 Boeing 929	" "
III a & b	5-6 Blount 500	" "
IV a & b	5-6 Halter 500	" "
V a & b	4-5 Blount 624	" "
VI a, b & c	3-4 Spaulding 209	" "
VII a & b	2 Golden Gate	Sausalito
VII c	2 Hawaii State	"

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM 1-aCentral MARIN SERVICEVessels: 5 - Spaulding 165Operating
Model No. II Base Demand

Regular Service: 50¢ Fare
16 Hour Weekdays 30 Round Trips/Day
10 Hour Sat/Sun/Holidays 18 Round Trips/Day
30 Minute Intervals 40 Minutes Block Time

Supplemental Service \$2.00 Fare
10 Bay Circle Cruises/Day (Off-Peak Weekdays)
9 Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare
11 Minute Interval

DIRECT OPERATING COST (DOC)Fixed Direct Operating Cost/Year3 Vessels (5,082hrs) @ \$ 387,994 \$ 1,163,9822 Vessels (3,847hrs) @ \$ 338,629 677,258

TOTAL F - DOC/YR

\$ 1,841,240Direct Operating Cost/Year - Underway (V - DOC)252 Weekdays 16 & 11 hrs/day3 Vessels (13.5 hrs/day) @ 81.46 /hr = \$ 831,3802 Vessels (8.94 hrs/day) @ 81.46 /hr = 367,039

Total Weekday V - DOC/Yr.

\$ 1,198,420

113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.0 hrs/day) @ 81.46 /hr = \$ 220,9202 Vessels (8.0 hrs/day) @ 81.46 /hr = 147,280

TOTAL S/S/H V - DOC/YR

\$ 368,200

TOTAL V - DOC/YR

\$ 1,566,620

TOTAL DOC/YR

\$ 3,407,860ESTIMATED TOTAL ANNUAL REVENUE:Regular Service 4,989 Commuters + Noncommuters \$ 2,148,747

Supplemental Service BCC

1,931,507

TOTAL REVENUE

\$ 4,080,254

GROSS PROFIT FROM OPERATIONS

\$ 672,394FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

5 Vessels @ \$ 2,100,000 Ea. \$ 10,500,000Vessels @ \$ Ea.TOTAL \$ 10,500,000\$ 976,878\$ 1,113,476

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM 1-b
Central MARIN SERVICE

Vessels: 5 - Spaulding 165

Operating
 Model No. II, Base Demand
 With Adjustments

Regular Service:	<u>50¢</u>	Fare	
16 Hour Weekdays		30	Round Trips/Day
10 Hour Sat/Sun/Holidays		18	Round Trips/Day
30 Minute Intervals		40	Minutes Block Time

Supplemental Service	<u>\$2.00</u>	Fare
10 Bay Circle Cruises/Day (Off-Peak Weekdays)		
9 Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>50¢</u>	Fare
11 Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3 Vessels (5,082hrs) @\$	<u>387,994</u>	\$ <u>1,163,982</u>
2 Vessels (3,847hrs) @ \$	<u>338,629</u>	<u>677,258</u>

TOTAL F - DOC/YR

\$ 1,841,240

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

3 Vessels (13.5 hrs/day)@	81.46/hr =	\$ <u>831,381</u>
2 Vessels (8.94 hrs/day)@	81.46/hr =	<u>367,039</u>

Total Weekday V - DOC/Yr.	\$ <u>1,198,420</u>
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113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.0 hrs/day)@	81.46/hr =	\$ <u>220,920</u>
2 Vessels (8.0 hrs/day)@	81.46/hr =	<u>147,280</u>

TOTAL S/S/H V - DOC/YR	\$ <u>368,200</u>
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TOTAL V - DOC/YR	\$ <u>1,566,620</u>
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TOTAL DOC/YR	\$ <u>3,407,860</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 5,488 Commuters + Noncommuters	\$ <u>2,363,665</u>
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Supplemental Service BCC	<u>1,931,507</u>
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TOTAL REVENUE	\$ <u>4,295,172</u>
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GROSS PROFIT FROM OPERATIONS	\$ <u>887,312</u>
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FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

5 Vessels @\$2,100,000 Ea.	\$ <u>10,500,000</u>
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Vessels @\$ Ea.	
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TOTAL	\$ <u>10,500,000</u>	\$ <u>976,878</u>	\$ <u>1,113,476</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM IIa
Central MARIN SERVICE

Vessels: 3 Spaulding 165
 2 Boeing 929-140

Operating
 Model No. II Base Demand
Increased for
Hydrofoil Service

Regular Service:	<u>50¢</u>	Fare	
<u>16</u> Hour Weekdays		<u>30</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays		<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals		<u>40</u>	Minutes Block Time

Supplemental Service \$3.50 Fare

<u>9</u> Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

<u>10</u> Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3-S165 Vessels (5,082hrs) @\$ 387,994 \$ 1,163,982

2-B-929 Vessels (3,847hrs) @ \$ 435,705 871,410

TOTAL F - DOC/YR

\$ 2,035,392

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays @ 16 & 11 hrs/day

3-S165 Vessels (13.5 hrs/day) @ \$81.46/hr = \$ 831,381

2-B929 Vessels (8.5 hrs/day) @ \$81.48/hr = 349,060

Total Weekday V - DOC/Yr.

\$ 1,180,441

113 Sat., Sun. & Holidays (10 hrs/day)

3-S165 Vessels (8.0 hrs/day) @ \$81.46/hr = \$ 220,920

2-B929 Vessels (8.0 hrs/day) @ \$81.48/hr = 147,315

TOTAL S/S/H V - DOC/YR

\$ 368,235

TOTAL V - DOC/YR

\$ 1,548,676

TOTAL DOC/YR

\$ 3,584,068

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 6,466 Commuters + Noncommuters \$ 2,784,887

Supplemental Service BCC

1,573,350

TOTAL REVENUE

\$ 4,358,237

GROSS PROFIT FROM OPERATIONS

\$ 774,169

FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

3 Vessels @ \$2,100,000 Ea. \$ 6,300,000

2 Vessels @ \$3,000,000 Ea. 6,000,000

TOTAL \$ 12,300,000

\$ 1,144,343

\$ 1,304,357

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM II b
Central MARIN SERVICE

Vessels: **3 Spaulding 165**
 2 Boeing 929-110

Operating
 Model No. II Base Demand
With Adjustment for
Hydrofoil & Improved Services

Regular Service:	<u>50¢</u>	Fare	
<u>16</u> Hour Weekdays		<u>30</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays		<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals		<u>40</u>	Minutes Block Time

Supplemental Service	<u>\$3.50</u>	Fare
<u>9</u> Bay Circle Cruises/Day (Off-Peak Weekdays)		
<u>9</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>50¢</u>	Fare
<u>10</u> Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3-S165 Vessels (5,082hrs) @\$ 387,994	\$ 1,163,982	
2-B929 Vessels (3,847hrs) @ \$ 435,705	<u>871,410</u>	
TOTAL F - DOC/YR		\$ <u>2,035,392</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

3-S165 Vessels (<u>13.5</u> hrs/day) @\$ <u>81.46/hr</u> =	\$ 831,380	
2-B929 Vessels (<u>8.5</u> hrs/day) @ <u>81.48/hr</u> =	<u>349,060</u>	
Total Weekday V - DOC/Yr.		\$ <u>1,180,441</u>

113 Sat., Sun. & Holidays (10 hrs/day)

3-S165 Vessels (<u>8.0</u> hrs/day) @ <u>81.46/hr</u> =	\$ 220,920	
2-B929 Vessels (<u>8.0</u> hrs/day) @ <u>81.48/hr</u> =	<u>147,315</u>	
TOTAL S/S/H V - DOC/YR		\$ <u>368,235</u>

TOTAL V - DOC/YR		\$ <u>1,548,676</u>
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TOTAL DOC/YR		\$ <u>3,584,068</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>6,800</u> Commuters + Noncommuters	\$ 2,928,740	
Supplemental Service BCC	<u>1,573,350</u>	
TOTAL REVENUE		\$ <u>4,502,090</u>

GROSS PROFIT FROM OPERATIONS		\$ <u>918,022</u>
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FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

<u>3 Vessels</u> @\$ <u>2,100,000</u> Ea.	\$ <u>6,300,000</u>
<u>2 Vessels</u> @\$ <u>3,000,000</u> Ea.	<u>6,000,000</u>

TOTAL	\$ <u>12,300,000</u>	\$ <u>1,144,343</u>	\$ <u>1,304,357</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM III a
Central MARIN SERVICE

Vessels: 5 Blount 500

Operating
Model No. I Base Demand
With Adjustments

Regular Service:	<u>75¢</u>	Fare	
<u>16</u> Hour Weekdays		<u>32</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays		<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals		<u>45</u>	Minutes Block Time

Supplemental Service	<u>\$ 1.75</u>	Fare
<u>10</u> Bay Circle Cruises/Day (Off-Peak Weekdays)		
<u>9</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>75¢</u>	Fare
<u>15</u> Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (<u>5,082</u> hrs) @\$ <u>311,861</u>	\$ <u>935,583</u>
<u>2</u> Vessels (<u>3,847</u> hrs) @ \$ <u>262,518</u>	<u>525,036</u>
TOTAL F - DOC/YR	\$ <u>1,460,619</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3</u> Vessels (<u>13.5</u> hrs/day) @ \$ <u>22.95/hr</u> =	\$ <u>234,228</u>
<u>2</u> Vessels (<u>9.0</u> hrs/day) @ <u>22.95/hr</u> =	<u>104,101</u>
Total Weekday V - DOC/Yr.	\$ <u>338,329</u>

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels (<u>8.33</u> hrs/day) @ \$ <u>22.95/hr</u> =	\$ <u>64,808</u>
<u>2</u> Vessels (<u>8.00</u> hrs/day) @ <u>22.95/hr</u> =	<u>41,493</u>
TOTAL S/S/H V - DOC/YR	\$ <u>106,301</u>

TOTAL V - DOC/YR	\$ <u>444,630</u>
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TOTAL DOC/YR	\$ <u>1,905,249</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>3,620</u> Commuters + Noncommuters	\$ <u>2,338,687</u>
Supplemental Service BCC	<u>949,050</u>
TOTAL REVENUE	\$ <u>3,287,737</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>1,382,488</u>
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FINANCING

Payment to Principal and Interest/Yr.	@ 7.0%	@ 8.75%
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<u>5</u> Vessels @\$ <u>825,000</u> Ea.	\$ <u>4,125,000</u>
<u> </u> Vessels @\$ <u> </u> Ea.	<u> </u>

TOTAL	\$ <u>4,125,000</u>	\$ <u>383,774</u>	\$ <u>437,437</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM III b
Central MARIN SERVICE

Vessels: 6 Blount 500

Operating
 Model No. I Base Demand With
 Adjustment Including 50¢ Fare

Regular Service: 50¢ Fare
16 Hour Weekdays 33 Round Trips/Day
10 Hour Sat/Sun/Holidays 18 Round Trips/Day
30 Minute Intervals 45 Minutes Block Time

Supplemental Service \$1.75 Fare
18 Bay Circle Cruises/Day (Off-Peak Weekdays)
16 Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare
13 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3 Vessels (5,082 hrs) @\$ 311,861 \$ 935,583
3 Vessels (3,847 hrs) @ \$ 262,518 787,554

TOTAL F - DOC/YR

\$ 1,723,137

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

3 Vessels (13.5 hrs/day) @ 22.95/hr = \$ 234,228
3 Vessels (9 hrs/day) @ 22.95/hr = 156,152

Total Weekday V - DOC/Yr.

\$ 390,380

113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.33 hrs/day) @ 22.95/hr = \$ 64,808
3 Vessels (8.00 hrs/day) @ 22.95/hr = 62,240

TOTAL S/S/H V - DOC/YR

\$ 127,048

TOTAL V - DOC/YR

\$ 517,428

TOTAL DOC/YR

\$ 2,240,565

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 4,600 Commuters + Noncommuters \$ 1,981,206

Supplemental Service BCC 1,401,464

TOTAL REVENUE

\$ 3,382,670

GROSS PROFIT FROM OPERATIONS

\$ 1,142,105

FINANCING

Payment to Principal and Interest/Yr.

\$ 7.0%

\$ 8.75%

6 Vessels @\$ 825,000 Ea. \$ 4,950,000

 Vessels @ \$ Ea.

TOTAL

\$ 4,950,000

\$ 460,528

\$ 524,924

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM IV a
Central MARIN SERVICE

Vessels: 5 Halter 500

Operating
Model No. I Base Demand
With Adjustments

Regular Service:	<u>75¢</u>	Fare
<u>16</u> Hour Weekdays	<u>32</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals	<u>45</u>	Minutes Block Time

Supplemental Service	<u>\$1.75</u>	Fare
<u>10</u> Bay Circle Cruises/Day (Off-Peak Weekdays)		
<u>9</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>75¢</u>	Fare
<u>15</u> Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (<u>5,082</u> hrs) @\$ <u>365,279</u>	\$ <u>1,095,837</u>
<u>2</u> Vessels (<u>3,847</u> hrs) @ \$ <u>315,931</u>	<u>631,862</u>
TOTAL F - DOC/YR	\$ <u>1,727,699</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3</u> Vessels (<u>13.5</u> hrs/day) @ \$35.26/hr =	\$ <u>359,864</u>
<u>2</u> Vessels (<u>9.0</u> hrs/day) @ \$35.26/hr =	<u>159,939</u>

Total Weekday V - DOC/Yr.	\$ <u>519,803</u>
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113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels (<u>8.33</u> hrs/day) @ \$35.26/hr =	\$ <u>99,570</u>
<u>2</u> Vessels (<u>8.0</u> hrs/day) @ \$35.26/hr =	<u>63,749</u>

TOTAL S/S/H V - DOC/YR	\$ <u>163,319</u>
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TOTAL V - DOC/YR	\$ <u>683,122</u>
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TOTAL DOC/YR	\$ <u>2,410,821</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>3,620</u> Commuters + Noncommuters	\$ <u>2,338,687</u>
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Supplemental Service BCC	<u>949,050</u>
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TOTAL REVENUE	\$ <u>3,287,737</u>
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GROSS PROFIT FROM OPERATIONS	\$ <u>876,916</u>
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FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

<u>5</u> Vessels @ \$ <u>1,650,000</u> Ea.	\$ <u>8,250,000</u>
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<u> </u> Vessels @ \$ <u> </u> Ea.	<u> </u>
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TOTAL	\$ <u>8,250,000</u>	\$ <u>767,547</u>	\$ <u>874,874</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM IV b
Central MARIN SERVICE

Vessels: 6 Halter 500

Operating
Model No. I Base Demand
With Adjustments Including
50¢ Fare

Regular Service:	50¢	Fare	
16 Hour Weekdays		33	Round Trips/Day
10 Hour Sat/Sun/Holidays		18	Round Trips/Day
30 Minute Intervals		45	Minutes Block Time

Supplemental Service \$1.75 Fare

15 Bay Circle Cruises/Day (Off-Peak Weekdays)
13 Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

13 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3 Vessels (5,082hrs) @\$ 365,279	\$ 1,095,837
3 Vessels (3,847hrs) @ \$ 315,931	947,793
TOTAL F - DOC/YR	\$ 2,043,630

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays @ 6 & 11 hrs/day

3 Vessels (13.5 hrs/day) @ \$35.26/hr =	\$ 359,864
3 Vessels (9.0 hrs/day) @ 35.26/hr =	239,909
Total Weekday V - DOC/Yr.	\$ 599,773

113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.33hrs/day) @ \$35.26/hr =	\$ 99,570
3 Vessels (8.0 hrs/day) @ 35.26/hr =	95,625
TOTAL S/S/H V - DOC/YR	\$ 195,195

TOTAL V - DOC/YR \$ 794,968

TOTAL DOC/YR \$ 2,838,598

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 4,600 Commuters + Noncommuters	\$ 1,981,206
Supplemental Service BCC	1,401,464
TOTAL REVENUE	\$ 3,382,670

GROSS PROFIT FROM OPERATIONS \$ 544,072

FINANCING

Payment to Principal and Interest/Yr.

6 Vessels @\$1,650,000 Ea.	\$ 9,900,000	@ 7.0%	@ 8.75%
Vessels @ \$ Ea.			
TOTAL	\$ 9,900,000	\$ 921,056	\$ 1,049,848

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM V a
Central MARIN SERVICE

Vessels: 4 Blount 624

Operating
Model No. I Base Demand
With Adjustments

Regular Service:	<u>75¢</u>	Fare	
16	Hour Weekdays	<u>31</u>	Round Trips/Day
10	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
30	Minute Intervals	<u>45</u>	Minutes Block Time

Supplemental Service	<u>\$1.75</u>	Fare
5	Bay Circle Cruises/Day (Off-Peak Weekdays)	
4	Bay Circle Cruises/Day (Sat/Sun/Holidays)	

Peak Commuter Service:	<u>75¢</u>	Fare
18	Minute Interval	

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3	Vessels (5,082hrs) @\$	<u>362,653</u>	\$	<u>1,087,959</u>
1	Vessels (3,847hrs) @ \$	<u>308,568</u>		<u>308,568</u>
TOTAL F - DOC/YR				<u>\$ 1,396,527</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

3	Vessels (13.5 hrs/day) @ \$26.20 /hr =	\$	<u>267,397</u>
1	Vessels (9.0 hrs/day) @ \$26.20 /hr =		<u>59,422</u>

Total Weekday V - DOC/Yr.		\$	<u>326,819</u>
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113 Sat., Sun. & Holidays (10 hrs/day)

3	Vessels (8.33hrs/day) @ \$26.20/hr =	\$	<u>73,985</u>
1	Vessels (8.0 hrs/day) @ 26.20/hr =		<u>23,685</u>

TOTAL S/S/H V - DOC/YR		\$	<u>97,670</u>
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TOTAL V - DOC/YR		\$	<u>424,489</u>
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TOTAL DOC/YR		\$	<u>1,821,016</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service	<u>3,620</u>	Commuters + Noncommuters	\$	<u>2,338,687</u>
Supplemental Service	BCC			<u>564,612</u>

TOTAL REVENUE		\$	<u>2,903,299</u>
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GROSS PROFIT FROM OPERATIONS		\$	<u>1,082,283</u>
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FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

4	Vessels @\$	<u>1,017,500</u>	Ea.	\$	<u>4,070,000</u>
	Vessels @\$		Ea.		

<u>4,070,000</u>	\$	<u>378,657</u>	\$	<u>431,604</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM V b
Central MARIN SERVICE

Vessels: 5 Blount 624

Operating
 Model No. I Base Demand
 With Adjustments Including
 50¢ Fare

Regular Service: 50¢ Fare
16 Hour Weekdays 32 Round Trips/Day
10 Hour Sat/Sun/Holidays 18 Round Trips/Day
30 Minute Intervals 45 Minutes Block Time

Supplemental Service \$1.75 Fare
10 Bay Circle Cruises/Day (Off-Peak Weekdays)
9 Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare
15 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3 Vessels (5,082hrs) @\$ 362,653 \$ 1,087,959
2 Vessels (3,847hrs) @ \$ 308,568 617,136
 TOTAL F - DOC/YR

\$ 1,705,095

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

3 Vessels (13.5 hrs/day) @\$26.20/hr = \$ 267,397
2 Vessels (9.0 hrs/day) @ \$26.20/hr = 118,843
 Total Weekday V - DOC/Yr. \$ 386,240

113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.33hrs/day) @ \$26.20/hr = \$ 73,985
2 Vessels (8.0 hrs/day) @ \$26.20/hr = 47,369
 TOTAL S/S/H V - DOC/YR \$ 121,355

TOTAL V - DOC/YR \$ 507,595

TOTAL DOC/YR \$ 2,212,690

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 4,600 Commuters + Noncommuters \$ 1,981,206
 Supplemental Service BCC 1,184,414
 TOTAL REVENUE \$ 3,165,620

GROSS PROFIT FROM OPERATIONS \$ 952,930

FINANCING

Payment to Principal and Interest/Yr. @ 7.0% @ 8.75%

5 Vessels @\$ 1,017,500 Ea. \$ 5,087,500
Vessels @\$ Ea.

TOTAL \$ 5,087,500 \$ 473,320 \$ 539,505

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM Vla
Central MARIN SERVICE

Vessels: 3 Spaulding 209

Operating
Model No. I base demand
with adjustments

Regular Service:	<u>75¢</u>	Fare
<u>16</u> Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals	<u>45</u>	Minutes Block Time

Supplemental Service	<u> </u>	Fare
<u> </u> Bay Circle Cruises/Day (Off-Peak Weekdays)		
<u> </u> Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>75¢</u>	Fare
<u>30</u> Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (<u>5,082</u> hrs) @\$ <u>454,348</u>	\$ <u>1,363,044</u>
<u> </u> Vessels (<u> </u> hrs) @ \$ <u> </u>	<u> </u>
TOTAL F - DOC/YR	\$ <u>1,363,044</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays <u>16</u> hrs/day	
<u>3</u> Vessels (<u>13.5</u> hrs/day) @ <u>51.57</u> /hr = \$ <u>526,323</u>	
<u> </u> Vessels (<u> </u> hrs/day) @ <u> </u> /hr = <u> </u>	
Total Weekday V - DOC/Yr.	\$ <u>526,323</u>
113 Sat., Sun. & Holidays (10 hrs/day)	
<u>3</u> Vessels (<u>8.33</u> hrs/day) @ <u>51.57</u> hr = \$ <u>145,627</u>	
<u> </u> Vessels (<u> </u> hrs/day) @ <u> </u> /hr = <u> </u>	
TOTAL S/S/H V - DOC/YR	\$ <u>145,627</u>

TOTAL V - DOC/YR	\$ <u>671,950</u>
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TOTAL DOC/YR	\$ <u>2,034,994</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>3620</u> Commuters + Noncommuters	\$ <u>2,338,687</u>
Supplemental Service BCC	<u> </u>
TOTAL REVENUE	\$ <u>2,338,687</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>303,693</u>
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FINANCING

Payment to Principal and Interest/Yr.	Ⓢ 7.0%	Ⓢ 8.75%
<u>3</u> Vessels @\$ <u>2,650,000</u> Ea.	\$ <u>7,950,000</u>	
<u> </u> Vessels @ \$ <u> </u> Ea.	<u> </u>	
TOTAL	\$ <u>7,950,000</u>	\$ <u>739,636</u> \$ <u>843,060</u>

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VI c
Central MARIN SERVICE

Vessels: 4 Spaulding 209

Operating
 Model No. I Base Demand with
 Adjustments Including 50¢ Fare

Regular Service: 50¢ Fare
 16 Hour Weekdays 31 Round Trips/Day
 10 Hour Sat/Sun/Holidays 18 Round Trips/Day
 30 Minute Intervals 45 Minutes Block Time

Supplemental Service \$1.75 Fare
 5 Bay Circle Cruises/Day (Off-Peak Weekdays)
 4 Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare
 18 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3 Vessels (5082 hrs) @\$ 454,348. \$ 1,363,044.
1 Vessels (3847 hrs) @ \$ 400,058. 400,058.

TOTAL F - DOC/YR \$ 1,763,102.

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16&1 hrs/day

3 Vessels (13.5 hrs/day) @ \$ 51.57/hr = \$ 526,323.
1 Vessels (9.0 hrs/day) @ \$ 51.57/hr = 116,961.

Total Weekday V - DOC/Yr. \$ 643,284.

113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.33 hrs/day) @ \$ 51.57/hr = \$ 145,627.
1 Vessels (8.0 hrs/day) @ \$ 51.57/hr = 46,619.

TOTAL S/S/H V - DOC/YR \$ 192,246.

TOTAL V - DOC/YR \$ 835,530.

TOTAL DOC/YR \$ 2,598,632.

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 4600 Commuters + Noncommuters \$ 1,981,206.

Supplemental Service BCC 883,111.

TOTAL REVENUE \$ 2,864,317.

GROSS PROFIT FROM OPERATIONS \$ 265,685

FINANCING

Payment to Principal and Interest/Yr.

@ 7.0%

@ 8.75%

4 Vessels @\$ 2,650,000. Ea. \$ 10,600,000

 Vessels @\$ Ea.

TOTAL \$ 10,600,000. \$ 986,182. \$ 1,124,080.

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VII a
Southern MARIN SERVICE

Vessels: 2 Golden Gate Class

Operating
Model No. I Base Demand

Regular Service:	<u>50¢</u>	Fare
<u>11</u> Hour Weekdays		<u>20</u> Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays		<u>18</u> Round Trips/Day
<u>30</u> Minute Intervals		<u>30</u> Minutes Block Time

Supplemental Service	<u> </u>	Fare
<u> </u> Bay Circle Cruises/Day (Off-Peak Weekdays)		
<u> </u> Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>50¢</u>	Fare
<u>30</u> Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>2</u> Vessels (3847 hrs) @\$ 256,946.	<u>\$ 513,892.</u>
<u> </u> Vessels (<u> </u> hrs) @ \$ <u> </u>	<u> </u>
TOTAL F - DOC/YR	<u>\$ 513,892.</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays <u>11</u> hrs/day	
<u>2</u> Vessels (8.16 hrs/day) @\$9.95 /hr =	<u>\$ 40,921.</u>
<u> </u> Vessels (<u> </u> hrs/day) @ <u> </u> /hr =	<u> </u>
Total Weekday V - DOC/Yr.	<u>\$ 40,921.</u>
113 Sat., Sun. & Holidays (10 hrs/day)	
<u>2</u> Vessels (7.35 hrs/day) @\$9.95/hr =	<u>\$ 16,528.</u>
<u> </u> Vessels (<u> </u> hrs/day) @ <u> </u> /hr =	<u> </u>
TOTAL S/S/H V - DOC/YR	<u>\$ 16,528.</u>

TOTAL V - DOC/YR	<u>\$ 57,449.</u>
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TOTAL DOC/YR	<u>\$ 571,341.</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>1198</u> Commuters + Noncommuters	<u>\$ 515,975.</u>
Supplemental Service BCC	<u> </u>
TOTAL REVENUE	<u>\$ 515,975.</u>

GROSS PROFIT FROM OPERATIONS	<u>\$ (55,366.)</u>
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FINANCING

Payment to Principal and Interest/Yr.	@ 7.0%	@ 8.75%
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<u>2</u> Vessels @\$ 700,000. Ea.	<u>\$ 1,400,000</u>		
<u> </u> Vessels @\$ <u> </u> Ea.	<u> </u>		
TOTAL	<u>\$ 1,400,000.</u>	<u>\$ 130,250.</u>	<u>\$ 148,463.</u>

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VII b
Southern MARIN SERVICE

Vessels: 2 Golden Gate Class

Operating
Model No. I Base Demand

Regular Service:	<u>50¢</u>	Fare
<u>16</u> Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals	<u>30</u>	Minutes Block Time

Supplemental Service	<u> </u>	Fare
<u> </u> Bay Circle Cruises/Day (Off-Peak Weekdays)		
<u> </u> Bay Circle Cruises/Day (Sat/Sun/Holidays)		

Peak Commuter Service:	<u>50¢</u>	Fare
<u>30</u> Minute Interval		

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>2</u> Vessels (5082 hrs) @\$306,199.	\$ <u>612,398.</u>
<u> </u> Vessels (<u> </u> hrs) @ \$ <u> </u>	<u> </u>
TOTAL F - DOC/YR	\$ <u>612,398.</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays <u>16</u> hrs/day	
<u>2</u> Vessels (12.21 hrs/day) @ \$9.95 /hr =	\$ <u>61,231.</u>
<u> </u> Vessels (<u> </u> hrs/day) @ <u> </u> /hr =	<u> </u>
Total Weekday V - DOC/Yr.	\$ <u>61,231.</u>
113 Sat., Sun. & Holidays (10 hrs/day)	
<u>2</u> Vessels (9.35 hrs/day) @ 9.95 /hr =	\$ <u>21,025.</u>
<u> </u> Vessels (<u> </u> hrs/day) @ <u> </u> /hr =	<u> </u>
TOTAL S/S/H V - DOC/YR	\$ <u>21,025.</u>

TOTAL V - DOC/YR	\$ <u>82,256.</u>
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TOTAL DOC/YR	\$ <u>694,654.</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>1198</u> Commuters + Noncommuters	\$ <u>515,975.</u>
Supplemental Service BCC	<u> </u>
TOTAL REVENUE	\$ <u>515,975.</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>(178,679.)</u>
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FINANCING

Payment to Principal and Interest/Yr.	@ 7.0%	@ 8.75%
<u>2</u> Vessels @\$ <u>700,000.</u> Ea.	\$ <u>1,400,000</u>	
<u> </u> Vessels @\$ <u> </u> Ea.	<u> </u>	
TOTAL	\$ <u>1,400,000.</u>	\$ <u>130,250.</u> \$ <u>148,463.</u>

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VIIc
Southern MARIN SERVICE

Vessels: 2 Hawaii State

Operating
Model No. I base demand

Regular Service: 50¢ Fare
16 Hour Weekdays 30 Round Trips/Day
10 Hour Sat/Sun/Holidays 18 Round Trips/Day
30 Minute Intervals 30 Minutes Block Time

Supplemental Service Fare
 Bay Circle Cruises/Day (Off-Peak Weekdays)
 Bay Circle Cruises/Day (Sat/Sun/Holidays)
Peak Commuter Service: 50% Fare ^
30 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

2 Vessels (5082 hrs) @\$ 306,179 \$ 612,358
 Vessels (hrs) @ \$
TOTAL F - DOC/YR \$ 612,358

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 hrs/day
2 Vessels (12.5 hrs/day) @ 13.10 /hr = \$ 82,530
 Vessels (hrs/day) @ /hr =
Total Weekday V - DOC/Yr. \$ 82,530
113 Sat., Sun. & Holidays (10 hrs/day)
2 Vessels (7.5 hrs/day) @ 13.10 hr = \$ 22,205
 Vessels (hrs/day) @ /hr =
TOTAL S/S/H V - DOC/YR \$ 22,205

TOTAL V - DOC/YR \$ 104,735

TOTAL DOC/YR \$ 717,093

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 1,198 Commuters + Noncommuters \$ 515,975
Supplemental Service BCC
TOTAL REVENUE \$ 515,975
GROSS PROFIT FROM OPERATIONS \$ {201,118}

FINANCING

Payment to Principal and Interest/Yr. @ 7.0% @ 8.75%
2 Vessels @\$ 682,000 Ea. \$ 1,364,000
 Vessels @\$ Ea.
TOTAL \$ 1,364,000 \$ 126,901 \$ 144,645

SECTION VI

VI. COST AND REVENUE SUMMARIES, 1972

1. Profit and Loss Statement
2. Capital Investment & Debt Service Summary

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	<u>I a</u>
Southern Marin County Service - System	<u>VII a</u>

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,148,747	
Bay Circle Cruises	<u>1,931,507</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		\$ <u>4,596,229</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>3,407,860</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>4,302,775</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>293,454</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	\$ <u>42,479</u>
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FINANCING:

	@ 7.0%	@8.75%
System <u>Ia</u>	\$ <u>976,878</u>	\$ <u>1,113,476</u>
System <u>VII a</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,595,101</u>	<u>1,818,146</u>
NET INCOME	<u>- 42,479</u>	<u>- 42,479</u>
Annual Subsidy	<u>1,552,622</u>	<u>1,775,667</u>

COMMUTERS

System <u>Ia</u>	<u>3792</u>
System <u>VII a</u>	<u>998</u>
TOTAL	<u>4790</u>

Annual Subsidy Per Commuter	\$ <u>324.14</u>	\$ <u>370.71</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Ib
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,363,665	
Bay Circle Cruises	<u>1,931,507</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		\$ <u>4,811,147</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>3,407,860</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>4,302,775</u>

GROSS PROFIT FROM
OPERATIONS

\$ 508,372

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME
(Without Financing Expense)

\$ 257,397

FINANCING:

	@ 7.0%	@ 8.75%
System <u>Ib</u>	\$ <u>976,878</u>	\$ <u>1,113,476</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,595,101</u>	<u>1,818,146</u>
NET INCOME	<u>257,397</u>	<u>257,397</u>
Annual Subsidy	<u>1,337,704</u>	<u>1,560,749</u>

COMMUTERS

System <u>Ib</u>	<u>4171</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>5169</u>

Annual Subsidy Per Commuter	\$ <u>258.79</u>	\$ <u>301.94</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Ila
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,784,887	
Bay Circle Cruises	<u>1,573,350</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		<u>\$ 4,874,212</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>3,584,068</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>4,478,983</u>

GROSS PROFIT FROM
OPERATIONS

\$ 395,229

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME

(Without Financing Expense)

\$ 144,254

FINANCING:

	@ 7.0%	@ 8.75%
System <u>Ila</u>	\$ <u>1,144,343</u>	<u>\$ 1,304,357</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,762,566</u>	<u>2,009,027</u>
NET INCOME	<u>- 144,254</u>	<u>- 144,254</u>
Annual Subsidy	<u>1,618,312</u>	<u>1,864,773</u>

COMMUTERS

System <u>Ila</u>	<u>4500</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>5498</u>

Annual Subsidy Per Commuter	<u>\$ 294.35</u>	<u>\$ 339.17</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIb
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,928,740	
Bay Circle Cruises	<u>1,573,350</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		<u>\$ 5,018,065</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>3,584,068</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>4,478,983</u>

GROSS PROFIT FROM
OPERATIONS

\$539,082

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME

(Without Financing Expense)

\$288,107

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIb</u>	<u>\$ 1,144,343</u>	<u>\$1,304,357</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,762,566</u>	<u>2,009,027</u>
NET INCOME	<u>- 288,107</u>	<u>-288,107</u>
Annual Subsidy	<u>1,474,459</u>	<u>1,720,920</u>

COMMUTERS

System <u>IIb</u>	<u>4800</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>5798</u>

Annual Subsidy Per Commuter	<u>\$ 254.31</u>	<u>\$296.81</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIIa
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,338,687	
Bay Circle Cruises	<u>949,050</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		<u>\$ 3,803,712</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>1,905,249</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>2,800,164</u>

GROSS PROFIT FROM OPERATIONS		<u>\$ 1,003,548</u>
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Administrative Expenses:

General Administrative Overhead		<u>250,975</u>
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NET INCOME (Without Financing Expense)		<u>\$ 752,573</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIIa</u>	\$ <u>383,774</u>	\$ <u>437,437</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,001,997</u>	<u>1,142,107</u>
NET INCOME	<u>- 752,573</u>	<u>- 752,573</u>
Annual Subsidy	<u>249,424</u>	<u>389,534</u>

COMMUTERS

System <u>IIIa</u>	<u>3015</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4013</u>

Annual Subsidy Per Commuter	<u>\$ 62.15</u>	<u>\$ 97.07</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIIb
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206	
Bay Circle Cruises	<u>1,401,464</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		<u>\$3,898,645</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>2,240,565</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>3,135,480</u>

GROSS PROFIT FROM OPERATIONS	<u>\$ 763,165</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	<u>\$ 512,190</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIIb</u>	\$ 460,528	\$ 524,924
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,078,751</u>	<u>1,229,594</u>
NET INCOME	<u>- 512,190</u>	<u>- 512,190</u>
Annual Subsidy	<u>566,561</u>	<u>717,404</u>

COMMUTERS

System <u>IIIb</u>	<u>3500</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4498</u>

Annual Subsidy Per Commuter	<u>\$ 125.96</u>	<u>\$ 159.49</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	IVa
Southern Marin County Service - System	VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,338,687	
Bay Circle Cruises	949,050	
Southern Marin Service	515,975	
TOTAL REVENUE		\$3,803,712

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	2,410,821	
Southern Marin Service	571,341	
Terminal Expense	323,574	
TOTAL COST OF SERVICES		3,305,736

GROSS PROFIT FROM OPERATIONS	\$ 497,976
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Administrative Expenses:

General Administrative Overhead	250,975
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NET INCOME (Without Financing Expense)	\$ 247,001
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FINANCING:

	@ 7.0%	@ 8.75%
System IVa	\$ 767,547	\$ 874,874
System VIIa	130,250	148,463
Dredging & Floats	281,992	321,423
Onshore Terminals	205,981	234,784
TOTAL	1,385,770	1,579,544
NET INCOME	- 247,001	- 247,001
Annual Subsidy	1,138,769	1,332,543

COMMUTERS

System IVa	3015
System VIIa	998
TOTAL	4013

Annual Subsidy Per Commuter	\$ 283.77	\$ 332.06
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IVb
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206	
Bay Circle Cruises	<u>1,401,464</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		\$ <u>3,898,645</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>2,838,598</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		\$ <u>3,733,513</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>165,132</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	\$ <u>(85,843)</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>IVb</u>	\$ <u>921,056</u>	\$ <u>1,049,848</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,539,279</u>	<u>1,754,518</u>
NET INCOME	<u>(85,843)</u>	<u>(85,843)</u>
Annual Subsidy	<u>1,625,122</u>	<u>1,840,361</u>

COMMUTERS

System <u>IVb</u>	<u>3500</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4498</u>

Annual Subsidy Per Commuter	\$ <u>361.30</u>	\$ <u>409.15</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Va
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,338,687	
Bay Circle Cruises	<u>564,612</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		\$ <u>3,419,274</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>1,821,016</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>2,715,931</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>703,343</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	\$ <u>452,368</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>Va</u>	\$ <u>378,657</u>	\$ <u>431,604</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>996,880</u>	<u>1,136,274</u>
NET INCOME	<u>452,368</u>	<u>452,368</u>
Annual Subsidy	<u>544,512</u>	<u>683,906</u>

COMMUTERS

System <u>Va</u>	<u>3015</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4013</u>

Annual Subsidy Per Commuter	\$ <u>135.69</u>	\$ <u>170.42</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Vb
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ <u>1,981,206</u>	
Bay Circle Cruises	<u>1,184,414</u>	
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		\$ <u>3,681,595</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>2,212,690</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>3,107,605</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>573,990</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	\$ <u>323,015</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>Vb</u>	\$ <u>473,320</u>	\$ <u>539,505</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,091,543</u>	<u>1,244,175</u>
NET INCOME	<u>- 323,015</u>	<u>- 323,015</u>
Annual Subsidy	<u>768,528</u>	<u>921,160</u>

COMMUTERS

System <u>Vb</u>	<u>3500</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4498</u>

Annual Subsidy Per Commuter	\$ <u>170.86</u>	\$ <u>204.79</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	<u>Vla</u>
Southern Marin County Service - System	<u>VIIa</u>

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,338,687	
Bay Circle Cruises		
Southern Marin Service	<u>515,975</u>	
TOTAL REVENUE		\$ <u>2,854,662</u>

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	<u>2,034,994</u>	
Southern Marin Service	<u>571,341</u>	
Terminal Expense	<u>323,574</u>	
TOTAL COST OF SERVICES		<u>2,929,909</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>(75,247)</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	\$ <u>(326,222)</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>Vla</u>	\$ <u>739,636</u>	\$ <u>843,060</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,357,859</u>	<u>1,547,730</u>
NET INCOME	<u>(326,222)</u>	<u>(326,222)</u>
Annual Subsidy	<u>1,684,081</u>	<u>1,873,952</u>

COMMUTERS

System <u>Vla</u>	<u>3015</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4013</u>

Annual Subsidy Per Commuter	\$ <u>419.65</u>	\$ <u>466.97</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System VIb

Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206	
Bay Circle Cruises	883,111	
Southern Marin Service	515,975	
TOTAL REVENUE		\$ 3,380,292

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	2,713,326	
Southern Marin Service	571,341	
Terminal Expense	323,574	
TOTAL COST OF SERVICES		3,608,241

GROSS PROFIT FROM
OPERATIONS

\$ (227,949)

Administrative Expenses:

General Administrative Overhead	250,975
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NET INCOME

(Without Financing Expense)

\$ (478,924)

FINANCING:

	@ 7.0%	@ 8.75%
System <u>VIb</u>	\$ 986,182	\$ 1,124,080
System <u>VIIa</u>	130,250	148,463
Dredging & Floats	281,992	321,423
Onshore Terminals	205,981	234,784
TOTAL	1,604,405	1,828,750
NET INCOME	(478,924)	(478,924)
Annual Subsidy	2,083,329	2,307,674

COMMUTERS

System <u>VIb</u>	3500
System <u>VIIa</u>	998
TOTAL	4498

Annual Subsidy Per Commuter

\$ 463.17

\$ 513.04

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Vic
Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206	
Bay Circle Cruises	883,111	
Southern Marin Service	515,975	
TOTAL REVENUE		\$ 3,380,292

Cost of Services:

Vessel Expense		
Central Marin Service		
& Bay Circle Cruises	2,598,632	
Southern Marin Service	571,341	
Terminal Expense	323,574	
TOTAL COST OF SERVICES		3,493,547

GROSS PROFIT FROM
OPERATIONS () \$ (113,255)

Administrative Expenses:

General Administrative Overhead	250,975
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NET INCOME
(Without Financing Expense) \$ (364,230)

FINANCING:

	@ 7.0%	@8.75%
System <u>Vic</u>	\$ 986,182	\$ 1,124,080
System <u>VIIa</u>	130,250	148,463
Dredging & Floats	281,992	321,423
Onshore Terminals	205,981	234,784
TOTAL	1,604,405	1,828,750
NET INCOME	(364,230)	(364,230)
Annual Subsidy	1,968,635	2,192,980

COMMUTERS

System <u>Vic</u>	3500
System <u>VIIa</u>	998
TOTAL	4498

Annual Subsidy Per Commuter	\$ 437.67	\$ 487.55
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CAPITAL INVESTMENT & DEBT SERVICE SUMMARY
Recommended Corte Madera & Sausalito Service, System Ib & VIIa
(100% Borrowed Capital)

	<u>Capital Investment</u>	<u>8.75% Annual Debt Service</u>	<u>7.0% Annual Debt Service</u>
VESSELS			
5 Spaulding-165 Class	\$10,500,000		
1 Golden Gate Class	700,000		
1 MV "Golden Gate"	700,000		
<u>Total</u>	\$11,900,000	\$1,261,940	\$1,107,128
DREDGING & FLOATS			
Corte Madera Creek	\$ 1,905,000		
Tiburon	270,000		
Sausalito	270,000		
San Francisco	586,000		
<u>Total</u>	3,031,000	321,423	281,992
ONSHORE TERMINALS (1)			
<u>Corte Madera Creek</u>			
Concrete Pier	\$ 634,000		
Terminal Building	300,000		
Parking Area	175,000		
Warehouse & Shops	105,000		
Hydraulic Fill	350,000		
<u>Total</u>	1,564,000	165,855	145,508
<u>Tiburon</u>			
Concrete Pier	\$ 350,000		
Miscellaneous	50,000		
<u>Total</u>	400,000	42,418	37,214
<u>San Francisco (2)</u>			
Waiting Area	\$ 200,000		
Miscellaneous	50,000		
<u>Total</u>	250,000	26,511	23,259
TOTAL INVESTMENT	\$17,145,000		
TOTAL ANNUAL DEBT SERVICE		\$1,818,147	\$1,595,101

(1) Onshore Terminal cost estimates are provided for the convenience of the Bridge District. These estimates are beyond the scope of this study but are included to determine the overall cost of the system. Estimates do not include the cost of land acquisition or leasing.

(2) San Francisco Terminal estimate assumes that the cost of pier is part of BARTD project and not chargeable to the ferryboat project. It assumes also that other Ferry Building terminal improvements will be borne by those redeveloping the Ferry Building complex.

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